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FILE 'HCAPLUS' ENTERED AT 13:07:17 ON 07 JUL 2005

E GUO Z/AU
L1 327 S E3,E10
E GUO ZI/AU
L2 28 S E3,E8
L3 117 S E31,E32
E DUNPHY W/AU
L4 67 S E4-E8
L5 1 S (US20040018603# OR US6593110 OR US20020086392#)/PN OR (US2003
E CDC25
L6 1217 S E3
L7 1995 S CDC25?
L8 14 S L1-L5 AND L6,L7
L9 1 S L8 AND L5
L10 1 S L6,L7 AND 517
L11 3 S L6,L7 AND SQ(S)TQ
L12 5 S L6,L7 AND CARBOX?(S)TERMIN?(S)KINASE
L13 2 S L6,L7 AND CTK
L14 1 S L6,L7 AND AMINO(L)TERMIN?(L)FORKHEAD
L15 12 S L5,L6 AND 58
L16 2 S L5,L6 AND 58() (KD OR KDALTON OR KILODALTON OR KILO DALTON)
L17 1 S L5,L6 AND 58(L) (MW OR MOL MASS OR MOL WEIGHT)
L18 9 S L9-L14,L16,L17
L19 1 S L5,L6 AND 58 KDA
L20 10 S L18,L19
L21 0 S L5,L6 AND (58000 OR 58 000)
L22 13 S L8 NOT L20

FILE 'HCAPLUS' ENTERED AT 13:15:14 ON 07 JUL 2005

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L20 ANSWER 1 OF 10 HCAPLUS COPYRIGHT 2005 ACS on STN
 AN 2004:384441 HCAPLUS
 DN 140:403912
 ED Entered STN: 13 May 2004
 TI Structural and functional analysis of regulation of Chk2 kinase by Wip1 phosphatase
 AU Xu, Xiaozhou
 CS Dep. Gastroenterol. Surgery, Grad. Sch. Med., Kobe Univ., Kobe, 650-0017, Japan
 SO Kobe Daigaku Igakubu Kiyo (2004), 64(3,4), 31-39
 CODEN: KDIKAX; ISSN: 0075-6431
 PB Kobe Daigaku Igakubu
 DT Journal
 LA Japanese
 CC 13-1 (Mammalian Biochemistry)
 Section cross-reference(s): 7
 AB The Chk2 tumor suppressor protein is an evolutionarily conserved nuclear protein kinase that plays a crucial role in the response to DNA damage. Following DNA damage, Chk2 kinase is activated by phosphorylation of threonine 68 by the protein kinase ATM (ataxia-telangiectasia-mutated). Activated Chk2 then phosphorylates its downstream effectors, including the tumor suppressor p53, BRCA1 and PML, as well as the Cdc25 phosphatases. I showed that Chk2 assoc. with the oncogenic protein Wip1 (PPM1D), and dephosphorylates threonine 68 on phosphorylated Chk2. To investigate mechanisms of Chk2 inactivation by Wip1, I generated a series of truncated protein of Chk2. Chk2 SQ/TQ domain, including threonine 68, is necessary for Wip1 binding with Chk2 in vitro and in vivo. Thus, it is indicated that Wip1 phosphatase inhibits Chk2 activity by binding SQ/TQ domain of Chk2.
 ST Chk2 kinase Wip1 phosphatase DNA injury
 IT DNA
 RL: BSU (Biological study, unclassified); BIOL (Biological study) (damage; structural and functional anal. of regulation of Chk2 kinase by Wip1 phosphatase)
 IT DNA repair
 Human
 Phosphorylation, biological
 (structural and functional anal. of regulation of Chk2 kinase by Wip1 phosphatase)
 IT 421595-36-0, Gene PPM1D protein phosphatase
 RL: BSU (Biological study, unclassified); BIOL (Biological study) (structural and functional anal. of regulation of Chk2 kinase by Wip1 phosphatase)
 IT 244634-79-5, Chk2 protein kinase
 RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study) (structural and functional anal. of regulation of Chk2 kinase by Wip1 phosphatase)
 L20 ANSWER 2 OF 10 HCAPLUS COPYRIGHT 2005 ACS on STN
 AN 2004:384305 HCAPLUS
 DN 141:19281
 ED Entered STN: 12 May 2004
 TI TAF1 activates transcription by phosphorylation of serine 33 in histone H2B
 AU Maile, Tobias; Kwoczynski, Simona; Katzenberger, Rebecca J.; Wassarman, David A.; Sauer, Frank
 CS Department of Biochemistry, University of California-Riverside, Riverside,

CA, 95121, USA

SO Science (Washington, DC, United States) (2004), 304(5673), 1010-1014
CODEN: SCIEAS; ISSN: 0036-8075

PB American Association for the Advancement of Science

DT Journal

LA English

CC 6-1 (General Biochemistry)
Section cross-reference(s): 3

AB Dynamic changes in chromatin structure, induced by posttranslational modification of histones, play a fundamental role in regulating eukaryotic transcription. Here it was reported that histone H2B is phosphorylated at evolutionarily conserved Ser33 (H2B-S33) by the **carboxyl-terminal kinase** domain (CTK) of the Drosophila TFIID subunit TAF1. Phosphorylation of H2B-S33 at the promoter of the cell cycle regulatory gene string and the segmentation gene giant coincides with transcriptional activation. Elimination of TAF1 CTK activity in Drosophila cells and embryos reduces transcriptional activation and phosphorylation of H2B-S33. These data reveal that H2B-S33 is a physiologic substrate for the TAF1 CTK and that H2B-S33 phosphorylation is essential for transcriptional activation events that promote cell cycle progression and development.

ST histone H2B serine phosphorylation TAF1 transcription activation

IT Phosphorylation, biological
(H2B-S33, TAF1 CTK mediated; TAF1 activates transcription by phosphorylation of serine 33 in histone H2B)

IT Histones
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(H2B; TAF1 activates transcription by phosphorylation of serine 33 in histone H2B)

IT Transcription factors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(TAF1 (TATA box-binding protein-associated factor 1); TAF1 activates transcription by phosphorylation of serine 33 in histone H2B)

IT Drosophila
(TAF1 activates transcription by phosphorylation of serine 33 in histone H2B)

IT Transcriptional regulation
(activation, *stg/cdc25*, effect of H2B-S33 phosphorylation on; TAF1 activates transcription by phosphorylation of serine 33 in histone H2B)

IT Protein motifs
(**carboxyl-terminal kinase** domain, TAF1; TAF1 activates transcription by phosphorylation of serine 33 in histone H2B)

IT Gene, animal
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(*stg/cdc25*; TAF1 activates transcription by phosphorylation of serine 33 in histone H2B)

IT 56-45-1, Serine, biological studies
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(Ser33; TAF1 activates transcription by phosphorylation of serine 33 in histone H2B)

RE.CNT 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Apone, L; Genes Dev 1996, V10, P2368 HCAPLUS
- (2) Beisel, C; Nature 2002, V419, P857 HCAPLUS
- (3) Chen, B; Curr Biol 2002, V12, PR620 HCAPLUS
- (4) Cheung, W; Cell 2003, V113, P507 HCAPLUS
- (5) Dikstein, R; Cell 1996, V84, P781 HCAPLUS
- (6) Dunphy, E; Mol Cell Biol 2001, V20, P1134

- (7) Elgin, S; Biochemistry 1979, V18, P5679 HCAPLUS
- (8) Fischle, W; Nature 2003, V425, P475 HCAPLUS
- (9) Florence, B; Front Biosci 2001, V6, PD1008 HCAPLUS
- (10) Georgel, P; EMBO J 1997, V16, P4717 HCAPLUS
- (11) Goll, M; Genes Dev 2002, V16, P1739 HCAPLUS
- (12) Hamiche, A; Proc Natl Acad Sci USA 2001, V98, P14316 HCAPLUS
- (13) Isenberg, I; Annu Rev Biochem 1979, V48, P159 HCAPLUS
- (14) Jacobson, R; Science 2000, V288, P1422 HCAPLUS
- (15) Lee, M; Mol Biol Cell 1992, V3, P73 HCAPLUS
- (16) Lemon, B; Genes Dev 2000, V14, P2551 HCAPLUS
- (17) Luger, K; Curr Opin Struct Biol 1998, V8, P33 HCAPLUS
- (18) Luger, K; Nature 1997, V389, P251 HCAPLUS
- (19) Martin, J; Mol Cell Biol 1999, V19, P5548 HCAPLUS
- (20) Mizzen, C; Cell 1996, V87, P1261 HCAPLUS
- (21) Orphanides, G; Cell 2002, V108, P439 HCAPLUS
- (22) Pham, A; Science 2000, V289, P2357 HCAPLUS
- (23) Pile, L; Mol Cell Biol 2002, V22, P4965 HCAPLUS
- (24) Recht, J; EMBO J 1999, V18, P229 HCAPLUS
- (25) Rivera-Pomar, R; Trends Genet 1996, V12, P478 HCAPLUS
- (26) Um, M; Mol Cell Biol 2002, V21, P2435
- (27) Wassarman, D; J Cell Sci 2001, V114, P2895 HCAPLUS
- (28) Zheng, L; FEBS Lett 2002, V513, P124

L20 ANSWER 3 OF 10 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 2002:51660 HCAPLUS

DN 136:98853

ED Entered STN: 18 Jan 2002

TI Proteins and nucleic acids associated with aging and their detection in
identification of tissues undergoing senescence and of senescence
modulators

IN Burmer, Glenna; Pritchard, David; Brown, Joseph P.; Demas, Vasiliki

PA Lifespan Biosciences, Inc., USA

SO PCT Int. Appl., 70 pp.

CODEN: PIXXD2

DT Patent

LA English

IC ICM C12Q001-34

ICS C12Q001-68; A61K031-47

CC 9-16 (Biochemical Methods)

Section cross-reference(s): 1, 3, 6

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002004662	A1	20020117	WO 2001-US21361	20010703
	W:				
	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH,				
	CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH,				
	GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK,				
	LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ,				
	PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ,				
	UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD,				
	RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,				
	DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,				
	BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	AU 2001073208	A5	20020121	AU 2001-73208	20010703
	US 2002098495	A1	20020725	US 2001-898730	20010703
PRAI	US 2000-216470P	P	20000706		
	WO 2001-US21361	W	20010703		

CLASS

PATENT NO. CLASS PATENT FAMILY CLASSIFICATION CODES

WO 2002004662 ICM C12Q001-34
ICS C12Q001-68; A61K031-47

WO 2002004662 ECLA C12Q001/68M

US 2002098495 NCL 435/006.000; 435/007.100; 435/007.200

AB This invention relates to the discovery of nucleic acids and proteins associated with the aging processes, such as cell proliferation and senescence. The identification of these aging-associated nucleic acids and proteins have diagnostic uses in detecting the aging status of a cell population as well as applications for gene therapy and the delaying of the aging process.

ST protein aging nucleic acid; senescence tissue diagnosis protein nucleic acid; modulator senescence cell proliferation protein nucleic acid; gene therapy aging protein nucleic acid

IT Transducins
RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(β) like 1 and α -chain GNAT1 mRNA, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

IT Transport proteins
RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(ABC (ATP-binding cassette) transporters, TAP-like, human homolog of rat TAPL mRNA for; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

IT Gene, animal
RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(AF1q, mRNA, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

IT Proteins
RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(AFG3-like, up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

IT Proteins
RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(AKAP (A-kinase anchor protein), down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

IT Proteins
RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(AP-4 adaptor complex, β 4 subunit mRNA, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

IT Proteins
RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

- (ARL2 (ADP-ribosylation factor-like protein 2), down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Gene, animal
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (ATP5A, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Mitochondria
 (ATPase coupling factor 6 subunit, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Myosins
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (B, heavy chain, nonmuscle, MYH10, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Proteins
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (BAP2- α , mRNA, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Cell adhesion molecules
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (CALL, neural, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Transcription factors
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (CBF (core-binding factor), homolog of mouse, up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Proteins
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (CD18-tumor necrosis factor receptor 2-related, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Gene, animal
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (CD1D, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Gene, animal
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

study); USES (Uses)

(CDC25, CDC25Hu2, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

IT Proteins

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(CGI-27, up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

IT Gene, animal

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(CLP, up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

IT Gene, animal

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(COX17, up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

IT Proteins

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(CRABP-II (cellular retinoic acid-binding protein II), down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

IT Gene, animal

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(DBI, up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

IT Proteins

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(DEAD-box p72, up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

IT Proteins

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(DNA mismatch repair, MSH2, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

IT Proteins

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(DNA-binding protein SMBP2, mRNA, up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

IT Proteins

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(DNA-binding, mbp-1, down-regulated; proteins and nucleic acids associated

with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

IT Gene, animal

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(DR-nm23, mRNA, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

IT Gene, animal

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(DRES9, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

IT Gene, animal

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(Duo, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

IT Elongation factors (protein formation)

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(EF-1 β , up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

IT Gene, animal

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(ELL, up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

IT Proteins

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(FABP (fatty acid-binding protein), up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

IT Proteins

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(FIP-1, mRNA, up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

IT Gene, animal

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(G6PD, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

IT GABA receptors

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(GABAA, α 2 subunit, up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

- IT GTPase-activating protein
RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(GAPIII, human homolog of mouse, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Transcription factors
RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(GATA-2, up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Proteins
RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(GBP (guanylate-binding protein), isoform II, mRNA, up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Gene, animal
RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(GNAT1 mRNA, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Proteins
RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(GRP78 (glucose-regulated protein, 78 kDa), up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Gene, animal
RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(H-pkl, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Histones
RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(H3.1, up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Gene, animal
RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(HEK, receptor tyrosine kinase, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Gene, animal
RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(HFREP-1, mRNA, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

- IT Gene, animal
RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(HLA, up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Heat-shock proteins
RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(HSP 27, up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Gene, animal
RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(HYA22, up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Antigens
RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(Hakata, mRNA, up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Gene, animal
RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(Has2, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Insulin-like growth factor-binding proteins
RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(IGFBP-5, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Myosins
RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(II, 20 kDa light chain (MLC-2) and cardiac ventricular light chain, up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Annexins
RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(II, up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Proteins
RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(IRS-1 (insulin receptor substrate 1), down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Transcription factors
RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic

use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(Ikaros, LyF-1 homolog (hlk-1), down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

IT Gene, animal

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(Image Clone ID 113943, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

IT Gene, animal

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(Image Clone ID 115019, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

IT Gene, animal

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(Image Clone ID 120291, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

IT Gene, animal

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(Image Clone ID 131132, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

IT Gene, animal

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(Image Clone ID 131799, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

IT Gene, animal

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(Image Clone ID 142969, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

IT Gene, animal

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(Image Clone ID 147318, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

IT Gene, animal

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(Image Clone ID 151231, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues

- undergoing senescence and of senescence modulators)
- IT Gene, animal
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (Image Clone ID 153377, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Gene, animal
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (Image Clone ID 172326, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Gene, animal
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (Image Clone ID 172477, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Gene, animal
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (Image Clone ID 174234, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Gene, animal
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (Image Clone ID 177856, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Gene, animal
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (Image Clone ID 178543, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Gene, animal
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (Image Clone ID 182188, up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Gene, animal
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (Image Clone ID 183487, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Gene, animal
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

- (Image Clone ID 183613, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Gene, animal
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (Image Clone ID 186205, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Gene, animal
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (Image Clone ID 194484, up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Gene, animal
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (Image Clone ID 197077, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Gene, animal
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (Image Clone ID 20082, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Gene, animal
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (Image Clone ID 22750, up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Gene, animal
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (Image Clone ID 230408, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Gene, animal
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (Image Clone ID 238346, up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Gene, animal
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (Image Clone ID 243024, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Gene, animal
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

- (Image Clone ID 24781, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Gene, animal
RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(Image Clone ID 252400, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Gene, animal
RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(Image Clone ID 25530, up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Gene, animal
RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(Image Clone ID 277422, up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Gene, animal
RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(Image Clone ID 280244, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Gene, animal
RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(Image Clone ID 28308, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Gene, animal
RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(Image Clone ID 291633, up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Gene, animal
RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(Image Clone ID 293133, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Gene, animal
RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(Image Clone ID 306032, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Gene, animal
RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

- (Image Clone ID 320839, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Gene, animal
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (Image Clone ID 322334, up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Gene, animal
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (Image Clone ID 323396, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Gene, animal
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (Image Clone ID 325674, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Gene, animal
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (Image Clone ID 360838, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Gene, animal
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (Image Clone ID 360931, up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Gene, animal
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (Image Clone ID 362329, up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Gene, animal
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (Image Clone ID 364111, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Gene, animal
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (Image Clone ID 364424, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Gene, animal
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

- (Image Clone ID 382093, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Gene, animal
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (Image Clone ID 38578, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Gene, animal
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (Image Clone ID 40965, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Gene, animal
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (Image Clone ID 41388, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Gene, animal
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (Image Clone ID 428541, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Gene, animal
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (Image Clone ID 428960, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Gene, animal
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (Image Clone ID 489983, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Gene, animal
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (Image Clone ID 503722, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Gene, animal
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (Image Clone ID 504351, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Gene, animal

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(Image Clone ID 51186, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

IT Gene, animal

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(Image Clone ID 527027, up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

IT Gene, animal

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(Image Clone ID 530551, up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

IT Gene, animal

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(Image Clone ID 530813, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

IT Gene, animal

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(Image Clone ID 531450, up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

IT Gene, animal

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(Image Clone ID 563318, up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

IT Gene, animal

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(Image Clone ID 611924, up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

IT Gene, animal

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(Image Clone ID 629587, up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

IT Gene, animal

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(Image Clone ID 647112, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

IT Gene, animal

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(Image Clone ID 725493, up-regulated; proteins and nucleic acids

associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

IT Gene, animal

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(Image Clone ID 75268, up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

IT Gene, animal

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(Image Clone ID 755035, up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

IT Gene, animal

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(Image Clone ID 755266, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

IT Gene, animal

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(Image Clone ID 757060, up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

IT Gene, animal

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(Image Clone ID 773422, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

IT Gene, animal

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(Image Clone ID 82042, mRNA, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

IT Gene, animal

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(Image Clone ID 82627, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

IT Gene, animal

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(Int-6, up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

IT Proteins

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(KIAA00102, up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

- IT Proteins
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (KIAA00148, up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Proteins
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (KIAA00160, up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Proteins
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (KIAA0038, up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Proteins
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (KIAA0067, up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Proteins
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (KIAA0076, up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Proteins
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (KIAA0080, homolog of synaptotagmin XI, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Gene, animal
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (KIAA0086, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Proteins
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (KIAA0349, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Proteins
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (KIAA1226, homologous to Sus scrofa mRNA for soluble angiotensin-binding protein; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Proteins
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic

use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(Krueppel-related zinc finger protein, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

IT Ribosomal proteins

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(L11, up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

IT Ribosomal proteins

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(L21, up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

IT Ribosomal proteins

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(L23a, up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

IT Ribosomal proteins

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(L27, up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

IT Ribosomal proteins

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(L30, up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

IT Ribosomal proteins

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(L31, up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

IT Ribosomal proteins

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(L32, up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

IT Ribosomal proteins

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(L35, mRNA, up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

IT Ribosomal proteins

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(L38, up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

IT Ribosomal proteins

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(L44, up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

IT Proteins

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(LIM, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

IT Protéins

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(MAP (microtubule-associated protein), MAP 1B (microtubule-associated

protein

1B), down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

IT Transcription factors

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(MBP-1 (histocompatibility antigen MHC-binding protein 1), down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

IT Glycoproteins

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(MHC class I antigen-like, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

IT Proteins

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(MHC class I-related, up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

IT Gene, animal

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(MYH10, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

IT Transcription factors

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(Mad4 homolog, up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

IT Gene, animal

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(MyD118, up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of

- senescence modulators)
- IT Proteins
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (NACA (nascent polypeptide-associated complex alpha), mRNA, up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Gene, animal
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (NDP, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Proteinase-activated receptors
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (PAR-2, up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Gene, animal
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (PDGFB, PDGFB, up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Gene, animal
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (PIG10, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Gene, animal
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (PROS-27, up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Gene, animal
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (PTD010, up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Gene, animal
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (PTPRG, receptor-type protein tyrosine phosphatase γ , down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Gene, animal
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (Pyst 1, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of

- senescence modulators)
- IT Ribosomal proteins
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (RPS4Y, up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Gene, animal
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (Rab12, up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Ras proteins
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (Ras-GRF2 (guanine nucleotide-releasing factor 2), down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Ribosomal proteins
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (S10, up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Proteins
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (S100 β subunit gene, up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Ribosomal proteins
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (S12, up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Ribosomal proteins
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (S13, up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Ribosomal proteins
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (S24, mRNA, up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Ribosomal proteins
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (S3, up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Splicing factors
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological

- study); USES (Uses)
 (SF2 (splicing factor 2), mRNA, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Transcription factors
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (TAFII32, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Gene, animal
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (TAPL, human homolog of, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Phosphoproteins
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (TATA box-binding protein-associated, up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Proteins
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (TAX-responsive element binding protein 107, up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Transcription factors
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (TFIIE (transcription factor IIE), α , up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Transcription factors
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (TFIIH (transcription factor IIH), 52 kD subunit of, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Transforming growth factor receptors
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (TGF- β receptor, type III, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Proteins
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (TGIF, up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Tumor necrosis factors
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(TNFSF4, up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

IT Proteins

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(TSC-22-related, up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

IT Proteins

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(XP-C repair complementing (p58/HHR23B), up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

IT Transcription factors

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(YB-1 (Y box-binding, 1), mRNA, up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

IT Gene, animal

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(ZNF131, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

IT Proteins

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(activator of apoptosis harakiri, up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

IT Proteins

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(adaptins, β adaptin 1, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

IT Proteins

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(adducin, γ subunit, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

IT Cell

(aging status of; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

IT Gene, animal

cdna

mRNA

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(aging-associated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of

- senescence modulators)
- IT Polynucleotides
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (antisense, for inhibiting cell senescence; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Proteins
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (butyrophilin BTF5, mRNA, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Gene, animal
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (c-fos, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Cadherins
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (cadherin 15, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Gene, microbial
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (cdc10, up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Proteins
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (cellular ligand of annexin II (p11), up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Proteins
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (claudins, claudin-10, up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT CD36 (antigen)
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (clone 21, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Apolipoproteins
 Endothelin receptors
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

- IT Elongation factors (protein formation)
RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(eEF-1 α , up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Proteins
RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(erythroid membrane protein 4.1, up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Proteins
RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(ets domain protein ERF, up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Gene, animal
RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(exon 1,2,3,4, clone:RES4-24A, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Gene
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(expression; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Gene, animal
RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(fau, up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Antisense DNA
Antisense RNA
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(for inhibiting cell senescence; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Transport proteins
RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(glutamate transporter, MEAAC2, up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Interleukin 3 receptors
RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(hIL-3Ra, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Gene, animal
RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(hMAD-2, down-regulated; proteins and nucleic acids associated with aging

and detection in identification of tissues undergoing senescence and of senescence modulators)

IT Proteins

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(hevin-like, up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

IT Ribonucleoproteins

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(hnRNP (heterogeneous nuclear ribonucleoprotein), E1, mRNA, up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

IT Ribonucleoproteins

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(hnRNP (heterogeneous nuclear ribonucleoprotein), K, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

IT Gene, animal

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(hnRNP C, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

IT Proteins

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(homolog of synaptocanalin 1, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

IT Mus musculus

(human homolog of GTPase-activating protein GAP111 of, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

IT Rattus norvegicus

(human homolog of TAPL mRNA for TAP-like ABC transporter of; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

IT Animal tissue culture

(in identification of senescence modulators; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

IT Aging, animal

(inhibitors; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

IT Proteins

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(l-plastins (leukocyte plastins), up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

- IT Proteins
RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(lamins, B2, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Proteins
RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(lysosome membrane protein II, up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Proteins
RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(mCAF1, up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Chemokines
RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(macrophage inflammatory protein 1, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Proteins
RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(membrane, integral, dgcr2/idd, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Proteins
RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(membrane, multispanning, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Proteins
RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(mitochondrial ubiquinone-binding, up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Proteins
RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(mitogen-activated protein kinase-activated, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Transport proteins
RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(neutral amino acid transporter, B, up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Transport proteins

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(organic anion transporter, multispecific, E, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

IT Proteins

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(osteoblast specific factor 2, mRNA, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

IT Synaptophysin

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(p38, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

IT Gene, animal

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(pag, up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

IT Proteins

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(phorbolin 1, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

IT Aging, animal

Cell aging

Cell proliferation

Diagnosis

Drug screening

Fibroblast

Gene therapy

Human

Immunoassay

Nucleic acid hybridization

Test kits

(proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

IT Probes (nucleic acid)

RL: ARG (Analytical reagent use); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

IT Proteins

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(putative tetraspan transmembrane L6H, up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

IT Proteins

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (rat interactor RINI, up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

IT mRNA

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (retinoblastoma susceptibility, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

IT Eye, neoplasm

(retinoblastoma, susceptibility mRNA, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

IT Proteins

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (selenium-containing, up-regulated; proteins and nucleic acids associated

with

aging and detection in identification of tissues undergoing senescence and of senescence modulators)

IT Nucleic acids

Proteins

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (senescence-associated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

IT Proteins

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(sigma 3B, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

IT Proteins

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(sodium/glucose cotransporter-like, mRNA, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

IT Proteins

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(subtilisin-like protein (PACE4), down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

IT Proteins

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(thymosin β -10, up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

IT Proteins

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic

- use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(thyroid hormone receptor coactivating, up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Gene, animal
RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(timp-2, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Antibodies and Immunoglobulins
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(to overexpressed senescence-associated proteins, for inhibiting cell senescence; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Proteins
RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(translation repressor nat1, up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Proteins
RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(transmembrane, rnp24, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Tumor necrosis factor receptors
RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(type 2, with CD18-related protein, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Keratins
RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(type II, 58 kD, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Enzymes, analysis
RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(ubiquitin-conjugating, Ubch7, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Interleukin 7 receptors
RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Heart
(ventricle, myosin light chain 2; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing

- senescence and of senescence modulators)
- IT Proteins
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (zinc finger-containing, clones 23667 and 23775, up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Proteins
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (zyxin, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT GABA receptors
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (α -6 subunit, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT G proteins (guanine nucleotide-binding proteins)
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (β subunit, mRNA, up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT Integrins
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (β 2, with tumor necrosis factor receptor 2-related protein, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT 119699-77-3, Inositol polyphosphate 5-phosphatase
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (43 kDa, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT 9001-60-9, Lactate dehydrogenase
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (B, up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT 9014-24-8
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (II, large subunit, up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT 9001-59-6, Pyruvate kinase
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (M2-Type, up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

- IT 9024-60-6, Ornithine decarboxylase
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (ODC1, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT 106096-93-9, Basic fibroblast growth factor
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (antisense, up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT 9028-04-0, NADH-ubiquinone oxidoreductase
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (chain 6 or subunit B13, up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT 9001-40-5, Glucose-6-phosphate dehydrogenase 9002-61-3, Chorionic gonadotropin 9023-46-5, Threonyl-tRNA synthetase 9027-88-7, Short chain acyl-CoA dehydrogenase 9031-71-4, Alanine-tRNA synthetase 9032-59-1, Fumarylacetoacetate hydrolase 12651-28-4, Transcobalamin II 37318-71-1, Guanosine 5'-monophosphate synthetase 67339-09-7, Thiopurine methyltransferase 83268-44-4 89964-14-7, Prothymosin α 109489-77-2, Tetranectin 110639-28-6, Thimet oligopeptidase 117698-12-1, Paraoxonase 124861-55-8, TIMP-2 139639-23-9, Tissue-type plasminogen activator 146592-50-9, HEK kinase 300865-46-7, Receptor tyrosine phosphatase- γ
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT 9028-86-8, Aldehyde dehydrogenase
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (gene, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT 106283-10-7, Inositol 1,4,5-trisphosphate 3-kinase
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (isoenzyme, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT 37256-73-8, Flavin-containing monooxygenase
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (isoform 1, up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT 109136-49-4, Ubiquitin-specific protease
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (isoform 9, up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of

- senescence modulators)
- IT 9004-06-2, Elastase
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (isoform IIA, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT 9068-52-4, CGMP phosphodiesterase
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (isoform γ , down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT 9027-51-4, Acetylglucosamine 1-phosphate mutase 80449-02-1, Tyrosine kinase
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (mRNA, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT 9054-75-5, Guanylate cyclase
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (mRNA, up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT 9054-89-1
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (manganese-dependent, up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT 9000-83-3, ATPase
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (mitochondrial coupling factor 6 subunit and transitional endoplasmic reticulum, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT 9028-11-9, Succinate-ubiquinone oxidoreductase
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (mitochondrial, iron sulfur subunit, up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)
- IT 139497-35-1, GenBank D90402 139793-47-8, GenBank J00650 139805-40-6, GenBank M16652 139825-04-0, GenBank J04142 139840-60-1, GenBank V00518 139866-58-3, GenBank M69181 140029-47-6, GenBank X03674 140030-60-0, GenBank M16342 140031-69-2, GenBank M21389 140034-21-5, GenBank M15518 140035-58-1, GenBank X06389 140064-33-1, GenBank M63180 140064-70-6, GenBank M55150 140086-88-0, GenBank M72709 140275-68-9, GenBank M37104 140279-25-0, GenBank X15088 140284-33-9, GenBank M16650 140285-77-4, GenBank M15400 140286-48-2, GenBank M26393 140287-57-6, GenBank M14630 140517-20-0, GenBank J05593 140610-83-9, GenBank M77693 140740-01-8, GenBank M34175 140742-00-3, GenBank M32019 140789-18-0, GenBank M63967 140960-36-7, GenBank X04506 141876-71-3, GenBank M94362 143342-04-5,

GenBank M98399 144014-70-0, GenBank L02648 144560-67-8, GenBank L04270 144755-63-5, GenBank M95549 145001-51-0, GenBank S48220 145347-70-2, GenBank S74678 145710-49-2, GenBank L07594 146208-98-2, GenBank S78187 146592-52-1, GenBank M83941 147617-78-5, GenBank L09247 148487-82-5, GenBank L13687 150220-18-1, GenBank D14446 150250-02-5, GenBank S62904 150472-62-1, GenBank L05500 150472-83-6, GenBank D13666 152054-30-3, GenBank U03911 152347-86-9, GenBank L06237 152348-09-9, GenBank U03891 154513-28-7, GenBank Z31695 155483-27-5, GenBank U09410 158764-16-0, GenBank D38522 159743-40-5, GenBank U10860 160075-39-8, GenBank D42045 165521-23-3, GenBank R38700 167051-23-2, GenBank H41572 168597-61-3, GenBank U20238 169922-75-2, GenBank Z50115 172013-51-3, GenBank D79985 173891-43-5, GenBank D83542 174058-78-7, GenBank X92098 174396-37-3, GenBank D45399 176136-11-1, GenBank U40462 177072-32-1, GenBank G23173 178660-33-8, GenBank X93921 179788-75-1, GenBank U54804 180173-28-8, GenBank Y07595 180426-57-7, GenBank X97335 180711-38-0, GenBank U49957 181290-31-3, GenBank U68018 185083-75-4, GenBank X99459 186445-92-1, GenBank AB000464 186931-62-4, GenBank AA236814 189923-05-5, GenBank U90552 191915-68-1, GenBank U94905 192143-80-9, GenBank AB002347 192840-34-9, GenBank AF002246 194676-67-0, GenBank X98654 194821-34-6, GenBank U94831 196771-90-1, GenBank AF010314 196968-98-6, GenBank U94190 198327-67-2, GenBank AF023130 201952-35-4, GenBank AJ000519 206324-81-4, GenBank Y12781 221427-67-4, GenBank AF102265 224698-13-9, GenBank AB015019 225450-41-9, GenBank AF092094 235739-20-5, GenBank AF168791 244380-70-9, GenBank AB027520 367831-54-7, GenBank D38169 382950-83-6, GenBank D84371 384425-63-2, GenBank M65062 384435-76-1, GenBank M68867 384443-47-4, GenBank X15183 384445-14-1, GenBank M74782 384451-58-5, GenBank D00044 384471-14-1, GenBank X64559 384479-94-1, GenBank M80482 384490-13-5, GenBank X65882 384556-98-3, GenBank S62539 384559-61-9, GenBank U02680 384609-28-3, GenBank U16954 384646-28-0, GenBank D32050 384648-64-0, GenBank U29656 384696-41-7, GenBank X95735 384732-21-2, GenBank D67031 384976-60-7, GenBank M55422 385097-49-4, GenBank U21858

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(nucleotide sequence, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

IT 137700-53-9, GenBank M38591 138791-31-8, GenBank M61733 139810-16-5, GenBank M23725 139811-01-1, GenBank X15940 139811-02-2, GenBank M31520 139811-17-9, GenBank M59488 139813-00-6, GenBank J03626 139856-46-5, GenBank X60489 140031-39-6, GenBank M29696 140032-31-1, GenBank D90228 140033-61-0, GenBank J02923 140035-35-4, GenBank M12783 140035-39-8, GenBank J05401 140035-81-0, GenBank J05068 140063-18-9, GenBank D90224 140072-78-2, GenBank X51420 140084-91-9, GenBank X59834 140094-05-9, GenBank M77836 140274-73-3, GenBank M62783 140278-18-8, GenBank M10050 140282-49-1, GenBank Y00711 140283-85-8, GenBank X07834 140286-10-8, GenBank M58459 140317-39-1, GenBank M60746 140323-40-6, GenBank X55715 140325-01-5, GenBank X52599 140514-92-7, GenBank X03342 140827-06-1, GenBank X63564 141003-67-0, GenBank X63468 142318-55-6, GenBank X65923 142481-63-8, GenBank X66141 142788-91-8, GenBank X65867 143001-98-3, GenBank D12676 143461-38-5, GenBank L00872 143990-07-2, GenBank J00191 143990-13-0, GenBank L01124 144560-37-2, GenBank L05095 144622-72-0, GenBank D11336 146044-79-3, GenBank X53505 147052-98-0, GenBank X13461 147271-89-4, GenBank M94314 147371-77-5, GenBank Z11793 147748-50-3, GenBank X59417 148449-43-8, GenBank L13436 148450-37-7, GenBank D14658 148664-96-4, GenBank X67951 150575-08-9, GenBank L14754 151211-08-4, GenBank L19527 151525-12-1, GenBank Z26876 152079-54-4, GenBank Z23090 152345-16-9, GenBank D26068 152394-12-2, GenBank Z22818 152651-13-3, GenBank Z29505 153793-54-5, GenBank U01925 155610-76-7, GenBank X79234

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 GenBank D16562 156675-03-5, GenBank U08989 156678-95-4, GenBank L14848
 157575-88-7, GenBank S72008 158024-12-5, GenBank D28118 158340-05-7,
 GenBank U14972 158480-64-9, GenBank X80909 158929-86-3, GenBank U12465
 160475-68-3, GenBank U16282 161072-11-3, GenBank L36463 161273-32-1,
 GenBank S54005 161784-36-7, GenBank L38826 164956-03-0, GenBank U21855
 165765-64-0, GenBank X84075 165765-87-7, GenBank X86693 167051-98-1,
 GenBank H41647 171845-36-6, GenBank D63482 172137-43-8, GenBank X87949
 172249-73-9, GenBank X89750 173231-99-7, GenBank D82580 173806-02-5,
 GenBank N57937 174239-51-1, GenBank N66609 175829-38-6, GenBank L77701
 176278-95-8, GenBank W22147 177310-05-3, GenBank X98093 177526-23-7,
 GenBank U53468 178847-33-1, GenBank U37230 179725-25-8, GenBank U53347
 180568-15-4, GenBank U62962 181253-47-4, GenBank D83699 181793-81-7,
 GenBank U59321 181851-17-2, GenBank G29980 182378-63-8, GenBank
 AA081285 183102-73-0, GenBank X98296 184185-54-4, GenBank AA147844
 186403-87-2, GenBank U87456 187501-51-5, GenBank U89916 188090-50-8,
 GenBank U90919 189356-92-1, GenBank D88153 189839-77-8, GenBank U41654
 191266-78-1, GenBank AA456265 199499-11-1, GenBank AF027204
 200518-20-3, GenBank AF016270 202639-78-9, GenBank Af040963
 205460-23-7, GenBank AJ001495 212655-58-8, GenBank D88587 216909-88-5,
 GenBank AF090950 244700-07-0, GenBank AF168768 245462-52-6, GenBank
 AF195883 382725-18-0, GenBank D10245 382899-53-8, GenBank G27595
 384422-15-5, GenBank D00017 384431-43-0, GenBank M55543 384440-79-3,
 GenBank J03827 384451-81-4, GenBank J02854 384463-40-5, GenBank J04617
 384474-61-7, GenBank M22348 384481-30-5, GenBank M68891 384487-89-2,
 GenBank M97388 384526-65-2, GenBank L03558 384591-57-5, GenBank D38548
 384611-55-6, GenBank X81987 384631-48-5, GenBank D63881 384645-36-7,
 GenBank U15655 384747-18-6, GenBank U73824 384993-65-1, GenBank S62907
 RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic
 use); PRP (Properties); ANST (Analytical study); BIOL (Biological study);
 USES (Uses)

(nucleotide sequence, up-regulated; proteins and nucleic acids associated
 with aging and detection in identification of tissues undergoing
 senescence and of senescence modulators)

IT 142243-02-5, Mitogen-activated protein kinase

RL: MSC (Miscellaneous)

(protein activated by, down-regulated; proteins and nucleic acids
 associated with aging and detection in identification of tissues
 undergoing senescence and of senescence modulators)

IT 9001-15-4, Creatine kinase

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic
 use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(sarcomeric mitochondrial MtCK, up-regulated; proteins and nucleic
 acids associated with aging and detection in identification of tissues
 undergoing senescence and of senescence modulators)

IT 9012-42-4, Adenylate cyclase 70712-46-8, 5'-Iodothyronine deiodinase

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic
 use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological
 study); USES (Uses)

(type I, down-regulated; proteins and nucleic acids associated with aging
 and detection in identification of tissues undergoing senescence and of
 senescence modulators)

IT 9023-70-5, Glutamine synthase 9023-99-8, Cystathionine- β -synthase

9027-35-4, Glycine amidinotransferase 9027-46-7, Acetoacetyl-coenzyme A
 thiolase 9027-81-0, Adenylosuccinate lyase 9029-17-8, Pyrroline

5-carboxylate reductase 9075-63-2, α -N-Acetylgalactosaminidase

12651-27-3, Transcobalamin I 65979-36-4, Signal peptidase 74870-74-9,

UMP synthase 99194-04-4, Cystatin B 150605-53-1, 5,6-Dihydroxyindole-2-

carboxylic acid oxidase 253170-37-5, Mitogen-and stress-activated

protein kinase-2 272788-46-2, Stratum corneum tryptic enzyme

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses) (up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

IT 60382-71-0, Diacylglycerol kinase

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(ζ mRNA, down-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

IT 9061-61-4, Nerve growth factor

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(β , up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

IT 9012-90-2, DNA polymerase

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(γ , mitochondrial protein, up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

IT 37205-63-3, ATP synthase

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(γ -subunit L-type and mitochondrial D-subunit, up-regulated; proteins and nucleic acids associated with aging and detection in identification of tissues undergoing senescence and of senescence modulators)

RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Campisi; US 5965543 A 1999 HCAPLUS
- (2) Dimri; US 5795728 A 1998 HCAPLUS
- (3) Guarente; US 6228583 B1 2001 HCAPLUS
- (4) Linskens; US 5744300 A 1998 HCAPLUS
- (5) Mudryj; US 5705350 A 1998 HCAPLUS
- (6) Villeponteau; US 6054575 A 2000 HCAPLUS
- (7) West; US 5589483 A 1996 HCAPLUS
- (8) West; US 5874444 A 1999 HCAPLUS

L20 ANSWER 4 OF 10 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 2002:5045 HCAPLUS

DN 136:163171

ED Entered STN: 02 Jan 2002

TI Activation of phospholipase C- ϵ by heterotrimeric G protein $\beta\gamma$ -subunits

AU Wing, Michele R.; Houston, Dayle; Kelley, Grant G.; Der, Channing J.; Siderovski, David P.; Harden, T. Kendall

CS Department of Pharmacology, Program in Neurobiology, University of North Carolina School of Medicine, Chapel Hill, NC, 27599, USA

SO Journal of Biological Chemistry (2001), 276(51), 48257-48261
CODEN: JBCHA3; ISSN: 0021-9258

PB American Society for Biochemistry and Molecular Biology

DT Journal

LA English

CC 7-3 (Enzymes)

AB PLC- ϵ was identified recently as a phosphoinositide-hydrolyzing phospholipase C (PLC) containing catalytic domains (X, Y, and C2) common to

all PLC isoenzymes as well as unique CDC25- and Ras-associating domains. Novel regulation of this PLC isoenzyme by the Ras onco-protein and α -subunits ($G\alpha_{12}$) of heterotrimeric G proteins was illustrated. Sequence analyses of PLC- ϵ revealed previously unrecognized PH and EF-hand domains in the amino terminus. The known interaction of $G\beta\gamma$ subunits with the PH domains of other proteins led us to examine the capacity of $G\beta\gamma$ to activate PLC- ϵ . Co-expression of $G\beta_{1\gamma 2}$ with PLC- ϵ in COS-7 cells resulted in marked stimulation of phospholipase C activity. $G\beta_2$ and $G\beta_4$ in combination with $G\gamma_1$, $G\gamma_2$, $G\gamma_3$, or $G\gamma_{13}$ also activated PLC- ϵ to levels similar to those observed with $G\beta_1$ -containing dimers of these $G\gamma$ -subunits. $G\beta_3$ in combination with the same $G\gamma$ -subunits was less active, and $G\beta_5$ -containing dimers were essentially inactive. $G\beta\gamma$ -promoted activation of PLC- ϵ was blocked by cotransfection with either of two $G\beta\gamma$ -interacting proteins, $G\alpha_{i1}$ or the **carboxyl terminus of G protein receptor kinase**

2. Pharmacol. inhibition of PI3-kinase- γ had no effect on $G\beta_{1\gamma 2}$ -promoted activation of PLC- ϵ . Similarly, activation of Ras in the action of $G\beta\gamma$ is unlikely, because a mutation in the second RA domain of PLC- ϵ that blocks Ras activation of PLC failed to alter the stimulatory activity of $G\beta_{1\gamma 2}$. Taken together, these results reveal the presence of addnl. functional domains in PLC- ϵ and add a new level of complexity in the regulation of this novel enzyme by heterotrimeric G proteins.

ST phospholipase C epsilon G protein

IT Protein motifs

(PH (pleckstrin homol.) domain; activation of phospholipase C- ϵ by heterotrimeric G protein $\beta\gamma$ -subunits)

IT EF hand

(activation of phospholipase C- ϵ by heterotrimeric G protein $\beta\gamma$ -subunits)

IT G proteins (guanine nucleotide-binding proteins)

RL: BSU (Biological study, unclassified); BIOL (Biological study)

(activation of phospholipase C- ϵ by heterotrimeric G protein $\beta\gamma$ -subunits)

IT Protein sequences

(alignment, phospholipase C domains; activation of phospholipase C- ϵ by heterotrimeric G protein $\beta\gamma$ -subunits)

IT 63551-76-8

RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)

(ϵ ; activation of phospholipase C- ϵ by heterotrimeric G protein $\beta\gamma$ -subunits)

RE.CNT 39 THERE ARE 39 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Baek, K; J Biol Chem 2001, V276, P5591 HCAPLUS
- (2) Barr, A; Biochemistry 2000, V39, P1800 HCAPLUS
- (3) Berridge, M; Annu Rev Biochem 1987, V56, P159 HCAPLUS
- (4) Blank, J; J Biol Chem 1992, V267, P23069 HCAPLUS
- (5) Boyer, J; J Biol Chem 1992, V267, P25451 HCAPLUS
- (6) Brown, H; Mol Pharmacol 1991, V40, P648 HCAPLUS
- (7) Camps, M; Eur J Biochem 1992, V206, P821 HCAPLUS
- (8) Carman, C; J Biol Chem 2000, V275, P10443 HCAPLUS
- (9) Cunningham, M; J Biol Chem 2001, V276, P5438 HCAPLUS
- (10) Daaks, Y; Proc Natl Acad Sci U S A 1997, V94, P2180
- (11) Essen, L; Nature 1996, V380, P595 HCAPLUS
- (12) Fushman, D; J Biol Chem 1998, V273, P2835 HCAPLUS
- (13) Jin, T; J Biol Chem 2001, V276, P30301 HCAPLUS

- (14) Jones, D; J Mol Biol 1999, V292, P195 HCAPLUS
- (15) Kelley, G; EMBO J 2001, V20, P743 HCAPLUS
- (16) Kelley, L; J Mol Biol 2000, V299, P499 HCAPLUS
- (17) Kim, Y; J Biol Chem 1929, V274, P26127
- (18) Koch, W; J Biol Chem 1994, V269, P6193 HCAPLUS
- (19) Lopez, I; J Biol Chem 2001, V276, P2758 HCAPLUS
- (20) Mahadevan, D; Biochemistry 1995, V34, P9111 HCAPLUS
- (21) Meisenhelder, J; Cell 1989, V57, P1099
- (22) Rhee, S; Annu Rev Biochem 2001, V70, P281 HCAPLUS
- (23) Rhee, S; J Biol Chem 1992, V267, P12393 HCAPLUS
- (24) Rhee, S; J Biol Chem 1997, V272, P15045 HCAPLUS
- (25) Sankaran, B; J Biol Chem 1998, V273, P7148 HCAPLUS
- (26) Shibatohe, M; J Biol Chem 1998, V273, P6218 HCAPLUS
- (27) Siderovski, D; Methods Enzymol 2001, V344, P702
- (28) Smrcka, A; Science 1991, V251, P804 HCAPLUS
- (29) Sondek, J; Biochem Pharmacol 2001, V61, P1329 HCAPLUS
- (30) Song, C; J Biol Chem 2001, V276, P2752 HCAPLUS
- (31) Taylor, S; Nature 1991, V350, P516 HCAPLUS
- (32) Touhara, K; J Biol Chem 1994, V269, P10217 HCAPLUS
- (33) Ui, M; Trends Biochem Sci 1995, V20, P303 HCAPLUS
- (34) Vlahos, C; J Biol Chem 1994, V269, P5241 HCAPLUS
- (35) Wahl, M; Proc Natl Acad Sci U S A 1989, V86, P1568 HCAPLUS
- (36) Waldo, G; J Biol Chem 1991, V266, P14217 HCAPLUS
- (37) Wang, T; J Biol Chem 2000, V275, P7466 HCAPLUS
- (38) Wu, D; J Biol Chem 1992, V267, P1811 HCAPLUS
- (39) Zohn, I; Oncogene 2000, V19, P3866 HCAPLUS

L20 ANSWER 5 OF 10 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 2001:816867 HCAPLUS

DN 135:352831

ED Entered STN: 09 Nov 2001

TI Cds1 kinase, checkpoint-activating oligonucleotides, and methods for
modulating cell cycle progression

IN Dunphy, William G.; Guo, Zijian

PA California Institute of Technology, USA

SO PCT Int. Appl., 75 pp.

CODEN: PIXXD2

DT Patent

LA English

IC ICM C12N

CC 1-12 (Pharmacology)

Section cross-reference(s): 3, 7, 12

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001083703	A2	20011108	WO 2001-US14646	20010504 <--
	WO 2001083703	A3	20020321		
	W: CA, JP				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR				
	US 2002086392	A1	20020704	US 2001-849617	20010504 <--
	US 6593110	B2	20030715		
	US 2004018603	A1	20040129	US 2003-618173	20030711 <--
PRAI	US 2000-202028P	P	20000504	<--	
	US 2001-849617	A3	20010504	<--	

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2001083703	ICM	C12N
WO 2001083703	ECLA	C07K014/47A26

US 2002086392 NCL 435/069.100; 435/252.300; 435/320.100; 530/352.000;
536/023.500
ECLA C07K014/47A26 <--

US 2004018603 NCL 435/194.000; 435/069.100; 435/320.100; 435/325.000;
536/023.200
ECLA C07K014/47A26 <--

AB The present invention provides polypeptides (Cds1) that are involved in regulating the progression of the cell cycle. The polypeptides are activated by double-stranded (ds) DNA and phosphorylated in response to the presence of ds-DNA. Checkpoint-activating oligonucleotides are the oligonucleotides which are capable of forming a hairpin structure by annealing and thus acting as ds-DNA. Also provided are polynucleotides encoding Cds1 polypeptides and methods for modulating cell cycle progression in a cell. Once activated, the polypeptide can phosphorylate Cdc25 polypeptides. The phosphorylation of the polypeptide and the following phosphorylation of Cdc25 polypeptides ensures that the timing of the cell cycle progression is appropriate. Xenopus homologs of Cds1, XCds1, is being activated by poly(dT)40; having a mol. mass of about 58 kD; having about 517 -amino acids; having SQ/TQ motifs at the amino terminal region; having a carboxy terminal kinase domain; and having an amino terminal forkhead-associated domain.

ST Xenopus Cds1 kinase cDNA sequence; oligonucleotide cell cycle checkpoint activating oligonucleotide

IT Xenopus laevis
(Cds1 homolog from; Cds1 kinase, checkpoint-activating oligonucleotides, and methods for modulating cell cycle progression)

IT Drugs
Molecular cloning
Signal transduction, biological
Test kits
(Cds1 kinase, checkpoint-activating oligonucleotides, and methods for modulating cell cycle progression)

IT Animal
Mouse
(Cds1 transgenic; Cds1 kinase, checkpoint-activating oligonucleotides, and methods for modulating cell cycle progression)

IT Plasmid vectors
Virus vectors
(Cds1-encoding; Cds1 kinase, checkpoint-activating oligonucleotides, and methods for modulating cell cycle progression)

IT Antibodies
Antisense RNA
Oligonucleotides
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(Cds1; Cds1 kinase, checkpoint-activating oligonucleotides, and methods for modulating cell cycle progression)

IT Disease, animal
(associated with increased cell cycle progression, treating; Cds1 kinase, checkpoint-activating oligonucleotides, and methods for modulating cell cycle progression)

IT Vertebrate (Vertebrata)
(cell, expression host; Cds1 kinase, checkpoint-activating oligonucleotides, and methods for modulating cell cycle progression)

IT Mitosis
(delay, increasing; Cds1 kinase, checkpoint-activating oligonucleotides, and methods for modulating cell cycle progression)

- IT Genetic polymorphism
(detection; Cds1 kinase, checkpoint-activating oligonucleotides, and methods for modulating cell cycle progression)
- IT Cell proliferation
(disorder associated with, treating; Cds1 kinase, checkpoint-activating oligonucleotides, and methods for modulating cell cycle progression)
- IT DNA
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(double-stranded, oligonucleotides forming; Cds1 kinase, checkpoint-activating oligonucleotides, and methods for modulating cell cycle progression)
- IT cDNA sequences
(for Cds1 kinase of Xenopus; Cds1 kinase, checkpoint-activating oligonucleotides, and methods for modulating cell cycle progression)
- IT Conformation
(hairpin loop, oligonucleotides capable of forming; Cds1 kinase, checkpoint-activating oligonucleotides, and methods for modulating cell cycle progression)
- IT Diagnosis
(mol., of Cds-1-associated disorder; Cds1 kinase, checkpoint-activating oligonucleotides, and methods for modulating cell cycle progression)
- IT Antibodies
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(monoclonal, Cds1; Cds1 kinase, checkpoint-activating oligonucleotides, and methods for modulating cell cycle progression)
- IT Protein sequences
(of Cds1 kinase of Xenopus; Cds1 kinase, checkpoint-activating oligonucleotides, and methods for modulating cell cycle progression)
- IT Enzyme functional sites
(of Cds1; Cds1 kinase, checkpoint-activating oligonucleotides, and methods for modulating cell cycle progression)
- IT Drug screening
(of modulators of phosphorylation; Cds1 kinase, checkpoint-activating oligonucleotides, and methods for modulating cell cycle progression)
- IT Computer program
(polymorphism indication using; Cds1 kinase, checkpoint-activating oligonucleotides, and methods for modulating cell cycle progression)
- IT Cell cycle
(progression; Cds1 kinase, checkpoint-activating oligonucleotides, and methods for modulating cell cycle progression)
- IT Phosphorylation, biological
(protein, modulation; Cds1 kinase, checkpoint-activating oligonucleotides, and methods for modulating cell cycle progression)
- IT DNA formation
(replication, checkpoints; Cds1 kinase, checkpoint-activating oligonucleotides, and methods for modulating cell cycle progression)
- IT Algorithm
(sequence comparison, computer system comprising; Cds1 kinase, checkpoint-activating oligonucleotides, and methods for modulating cell cycle progression)
- IT 140208-22-6, Cdc25 phosphatase
RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(Cdc25 phosphatase, phosphorylating by Cds1 homolog; Cds1 kinase, checkpoint-activating oligonucleotides, and methods for modulating cell cycle progression)

- IT 25086-81-1
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (Cds1 being activated by poly(dT)40; Cds1 kinase, checkpoint-activating oligonucleotides, and methods for modulating cell cycle progression)
- IT 307559-02-0P
 RL: BAC (Biological activity or effector, except adverse); BPN (Biosynthetic preparation); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (amino acid sequence; Cds1 kinase, checkpoint-activating oligonucleotides, and methods for modulating cell cycle progression)
- IT 372536-52-2
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (checkpoint-activating oligonucleotide, Oligo 1; Cds1 kinase, checkpoint-activating oligonucleotides, and methods for modulating cell cycle progression)
- IT 372536-53-3
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (checkpoint-activating oligonucleotide, Oligo 2; Cds1 kinase, checkpoint-activating oligonucleotides, and methods for modulating cell cycle progression)
- IT 372536-54-4
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (checkpoint-activating oligonucleotide, Oligo 3; Cds1 kinase, checkpoint-activating oligonucleotides, and methods for modulating cell cycle progression)
- IT 270892-24-5, GenBank AF174295
 RL: BUU (Biological use, unclassified); PRP (Properties); BIOL (Biological study); USES (Uses)
 (nucleotide sequence; Cds1 kinase, checkpoint-activating oligonucleotides, and methods for modulating cell cycle progression)
- IT 244634-79-5P, Protein kinase Cds1
 RL: BAC (Biological activity or effector, except adverse); BPN (Biosynthetic preparation); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (protein kinase Cds1; Cds1 kinase, checkpoint-activating oligonucleotides, and methods for modulating cell cycle progression)
- IT 372538-17-5 372538-18-6 372538-19-7 372538-20-0 372538-21-1 372538-22-2
 RL: PRP (Properties)
 (unclaimed nucleotide sequence; cds1 kinase, checkpoint-activating oligonucleotides, and methods for modulating cell cycle progression)
- IT 372478-77-8
 RL: PRP (Properties)
 (unclaimed sequence; cds1 kinase, checkpoint-activating oligonucleotides, and methods for modulating cell cycle progression)

L20 ANSWER 6 OF 10 HCAPLUS COPYRIGHT 2005 ACS on STN
 AN 2001:728962 HCAPLUS
 DN 136:17838
 ED Entered STN: 05 Oct 2001

TI Serine-345 is required for Rad3-dependent phosphorylation and function of
 checkpoint kinase Chk1 in fission yeast
 AU Lopez-Girona, Antonia; Tanaka, Katsunori; Chen, Xiao-Bo; Baber, Beth A.;
 McGowan, Clare H.; Russell, Paul
 CS Departments of Molecular and Cell Biology, MB3, The Scripps Research
 Institute, La Jolla, CA, 92037, USA
 SO Proceedings of the National Academy of Sciences of the United States of
 America (2001), 98(20), 11289-11294
 CODEN: PNASA6; ISSN: 0027-8424
 PB National Academy of Sciences
 DT Journal
 LA English
 CC 10-3 (Microbial, Algal, and Fungal Biochemistry)
 AB Genome integrity is monitored by a checkpoint that delays mitosis in
 response to DNA damage. This checkpoint is enforced by Chk1, a protein
 kinase that inhibits the mitotic inducer Cdc25. In fission
 yeast, Chk1 is regulated by a group of proteins that includes Rad3, a
 protein kinase related to human ATM and ATR. These kinases phosphorylate
 serine or threonine followed by glutamine (SQ/TQ).
 Fission yeast and human Chk1 proteins share two conserved SQ motifs at
 serine-345 and serine-367. Serine-345 of human Chk1 is phosphorylated in
 response to DNA damage. Here we report that Rad3 and ATM phosphorylate
 serine-345 of fission yeast Chk1. Mutation of serine-345 (chk1-S345A)
 abrogates Rad3-dependent phosphorylation of Chk1 in vivo. The chk1-S345A
 cells are sensitive to DNA damage and are checkpoint defective. In
 contrast, mutations of serine-367 and other SQ/TQ
 sites do not substantially impair the checkpoint or cause damage
 sensitivity. These findings attest to the importance of serine-345
 phosphorylation for Chk1 function and strengthen evidence that
 transduction of the DNA damage checkpoint signal requires direct
 phosphorylation of Chk1 by Rad3.
 ST checkpoint kinase Chk1 serine phosphorylation Rad3 fission yeast
 IT Cell cycle
 (G2-M arrest; serine-345 is required for Rad3-dependent phosphorylation
 and function of checkpoint kinase Chk1 in fission yeast)
 IT DNA
 RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (damage; serine-345 is required for Rad3-dependent phosphorylation and
 function of checkpoint kinase Chk1 in fission yeast)
 IT Protein motifs
 (phosphorylation site; serine-345 is required for Rad3-dependent
 phosphorylation and function of checkpoint kinase Chk1 in fission
 yeast)
 IT Phosphorylation, biological
 (protein; serine-345 is required for Rad3-dependent phosphorylation and
 function of checkpoint kinase Chk1 in fission yeast)
 IT Schizosaccharomyces pombe
 Signal transduction, biological
 (serine-345 is required for Rad3-dependent phosphorylation and function
 of checkpoint kinase Chk1 in fission yeast)
 IT 56-45-1, L Serine, biological studies 154907-65-0, Kinase
 (phosphorylating), gene chk1 protein 375856-04-5, Kinase
 (phosphorylating), gene rad3 protein
 RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (serine-345 is required for Rad3-dependent phosphorylation and function
 of checkpoint kinase Chk1 in fission yeast)
 IT 182970-53-2, ATM protein kinase
 RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (serine-345 of checkpoint kinase Chk1 is phosphorylated by fission
 yeast Rad3 and human ATM kinases)

RE.CNT 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE

- (1) Baber-Furnari, B; Mol Biol Cell 2000, V11, P1 HCAPLUS
- (2) Bahler, J; Yeast 1998, V14, P943 HCAPLUS
- (3) Bentley, N; EMBO J 1996, V15, P6641 HCAPLUS
- (4) Blasina, A; Curr Biol 1999, V9, P1 HCAPLUS
- (5) Blasina, A; Curr Biol 1999, V9, P1135 HCAPLUS
- (6) Caspari, T; Mol Cell Biol 2000, V20, P1254 HCAPLUS
- (7) Chen, P; Cell 2000, V100, P681 HCAPLUS
- (8) Cimprich, K; Proc Natl Acad Sci USA 1996, V93, P2850 HCAPLUS
- (9) Cliby, W; EMBO J 1998, V17, P159 HCAPLUS
- (10) Edwards, R; Nat Cell Biol 1999, V1, P393 HCAPLUS
- (11) Elledge, S; Science 1996, V274, P1664 HCAPLUS
- (12) Ford, J; Science 1994, V265, P533 HCAPLUS
- (13) Furnari, B; Mol Biol Cell 1999, V10, P833 HCAPLUS
- (14) Furnari, B; Science 1997, V277, P1495 HCAPLUS
- (15) Guo, Z; Genes Dev 2000, V14, P2745 HCAPLUS
- (16) Hartwell, L; Science 1989, V246, P629 HCAPLUS
- (17) Keegan, K; Genes Dev 1996, V10, P2423 HCAPLUS
- (18) Kim, S; J Biol Chem 1999, V274, P37538 HCAPLUS
- (19) Kumagai, A; Mol Cell 2000, V6, P839 HCAPLUS
- (20) Liu, Q; Genes Dev 2000, V14, P1448 HCAPLUS
- (21) Lopez-Girona, A; Curr Biol 2001, V11, P50 HCAPLUS
- (22) Lopez-Girona, A; Nature (London) 1999, V397, P172 HCAPLUS
- (23) Martinho, R; EMBO J 1998, V17, P7239 HCAPLUS
- (24) Melchionna, R; Nat Cell Biol 2000, V2, P762 HCAPLUS
- (25) Oe, T; Dev Biol 2001, V229, P250 HCAPLUS
- (26) Rhind, N; Curr Opin Cell Biol 1998, V10, P749 HCAPLUS
- (27) Rhind, N; Genes Dev 1997, V11, P504 HCAPLUS
- (28) Rhind, N; J Cell Sci 2000, V113, P3889 HCAPLUS
- (29) Saka, Y; Genes Dev 1997, V11, P3387 HCAPLUS
- (30) Savitsky, K; Science 1995, V268, P1749 HCAPLUS
- (31) Shimida, M; Mol Biol Cell 1999, V10, P3991
- (32) Tanaka, K; Mol Cell Biol 2001, V21, P3398 HCAPLUS
- (33) Walworth, N; Nature (London) 1993, V363, P368 HCAPLUS
- (34) Walworth, N; Science 1996, V271, P353 HCAPLUS
- (35) Wang, S; FEBS Lett 2000, V487, P277 HCAPLUS
- (36) Willson, J; Nucleic Acids Res 1997, V25, P2138 HCAPLUS
- (37) Wright, J; Proc Natl Acad Sci USA 1998, V95, P7445 HCAPLUS
- (38) Zhao, H; Mol Cell Biol 2001, V21, P4129 HCAPLUS

L20 ANSWER 7 OF 10 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 2001:465105 HCAPLUS

DN 135:193652

ED Entered STN: 28 Jun 2001

TI The cell cycle-regulatory **CDC25A** phosphatase inhibits apoptosis
signal-regulating kinase 1

AU Zou, Xianghong; Tsutsui, Tateki; Ray, Dipankar; Blomquist, James F.;
Ichijo, Hidenori; Ucker, David S.; Kiyokawa, Hiroaki

CS Departments of Molecular Genetics, University of Illinois College of
Medicine, Chicago, IL, 60607, USA

SO Molecular and Cellular Biology (2001), 21(14), 4818-4828

CODEN: MCEBD4; ISSN: 0270-7306

PB American Society for Microbiology

DT Journal

LA English

CC 14-1 (Mammalian Pathological Biochemistry)

AB **CDC25A** phosphatase promotes cell cycle progression by activating
G1 cyclin-dependent kinases and has been postulated to be an oncogene
because of its ability to cooperate with RAS to transform rodent

fibroblasts. In this study, we have identified apoptosis signal-regulating kinase 1 (ASK1) as a **CDC25A**-interacting protein by yeast two-hybrid screening. ASK1 activates the p38 mitogen-activated protein kinase (MAPK) and c-Jun NH2-terminal protein kinase-stress-activated protein kinase (JNK/SAPK) pathways upon various cellular stresses. Coimmunopptn. studies demonstrated that **CDC25A** phys. assoc. with ASK1 in mammalian cells, and immunocytochem. with confocal laser-scanning microscopy showed that these two proteins colocalize in the cytoplasm. The **carboxyl terminus** of **CDC25A** binds to a domain of ASK1 adjacent to its **kinase** domain and inhibits the **kinase** activity of ASK1, independent of and without effect on the phosphatase activity of **CDC25A**. This inhibitory action of **CDC25A** on ASK1 activity involves diminished homo-oligomerization of ASK1. Increased cellular expression of wild-type or phosphatase-inactive **CDC25A** from inducible transgenes suppresses oxidant-dependent activation of ASK1, p38, and JNK1 and reduces specific sensitivity to cell death triggered by oxidative stress, but not other apoptotic stimuli. Thus, increased expression of **CDC25A**, frequently observed in human cancers, could contribute to reduced cellular responsiveness to oxidative stress under mitogenic or oncogenic conditions, while it promotes cell cycle progression. These observations propose a mechanism of oncogenic transformation by the dual function of **CDC25A** on cell cycle progression and stress responses.

ST **CDC25A** cell cycle apoptosis carcinogenesis

IT Apoptosis

Cell cycle

Oxidative stress, biological

Polymerization

Signal transduction, biological

Transformation, neoplastic

(**CDC25A** phosphatase associated with oxidative stress promotes cell cycle progression by activating G1 cyclin-dependent kinases in carcinogenesis)

IT Reactive oxygen species

RL: ADV (Adverse effect, including toxicity); BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(**CDC25A** phosphatase associated with oxidative stress promotes cell cycle progression by activating G1 cyclin-dependent kinases in carcinogenesis)

IT Interphase (cell cycle)

(G1-phase; **CDC25A** phosphatase associated with oxidative stress promotes cell cycle progression by activating G1 cyclin-dependent kinases in carcinogenesis)

IT Polymerization

(oligomerization; **CDC25A** phosphatase associated with oxidative stress promotes cell cycle progression by activating G1 cyclin-dependent kinases in carcinogenesis)

IT Phosphorylation, biological

(protein; **CDC25A** phosphatase associated with oxidative stress promotes cell cycle progression by activating G1 cyclin-dependent kinases in carcinogenesis)

IT 140208-22-6, **CDC25A** phosphatase

RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or effector, except adverse); BOC (Biological occurrence); BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence); PROC (Process)

(**CDC25A** phosphatase associated with oxidative stress promotes cell cycle progression by activating G1 cyclin-dependent kinases in carcinogenesis)

- IT 7782-44-7D, Oxygen, reactive species
 RL: ADV (Adverse effect, including toxicity); BPR (Biological process);
 BSU (Biological study, unclassified); BIOL (Biological study); PROC
 (Process)
 (CDC25A phosphatase associated with oxidative stress promotes
 cell cycle progression by activating G1 cyclin-dependent kinases in
 carcinogenesis)
- IT 155215-87-5, Stress-activated protein kinase 165245-96-5, p38
 mitogen-activated protein kinase 185464-61-3, ASK1 kinase 192230-91-4,
 MKK3 kinase 194739-73-6, MKK6 kinase 289898-51-7, JNK1
 RL: BAC (Biological activity or effector, except adverse); BOC (Biological
 occurrence); BSU (Biological study, unclassified); BIOL (Biological
 study); OCCU (Occurrence)
 (CDC25A phosphatase associated with oxidative stress promotes
 cell cycle progression by activating G1 cyclin-dependent kinases in
 carcinogenesis)

RE.CNT 71 THERE ARE 71 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Adler, V; Oncogene 1999, V18, P6104 HCAPLUS
- (2) Behrens, A; Nat Genet 1999, V21, P326 HCAPLUS
- (3) Biguet, C; J Biol Chem 1994, V269, P28865 HCAPLUS
- (4) Blomberg, I; Mol Cell Biol 1999, V19, P6183 HCAPLUS
- (5) Bunz, F; Science 1998, V282, P1497 HCAPLUS
- (6) Cangi, M; J Clin Investig 2000, V106, P753 HCAPLUS
- (7) Chang, H; Science 1998, V281, P1860 HCAPLUS
- (8) Chen, X; Mol Cell Biol 1999, V19, P4695 HCAPLUS
- (9) Chen, Z; Oncogene 1999, V18, P173 HCAPLUS
- (10) Conklin, D; Proc Natl Acad Sci 1995, V92, P7892 HCAPLUS
- (11) Derijard, B; Science 1995, V267, P682 HCAPLUS
- (12) Draetta, G; Biochim Biophys Acta 1997, V1332, PM53 HCAPLUS
- (13) Eckstein, J; Protein Sci 1996, V5, P5 HCAPLUS
- (14) Fauman, E; Cell 1998, V93, P617 HCAPLUS
- (15) Galaktionov, K; Cell 1991, V67, P1181 HCAPLUS
- (16) Galaktionov, K; Genes Dev 1995, V9, P1046 HCAPLUS
- (17) Galaktionov, K; Nature 1996, V382, P511 HCAPLUS
- (18) Galaktionov, K; Science 1995, V269, P1575 HCAPLUS
- (19) Gasparotto, D; Cancer Res 1997, V57, P2366 HCAPLUS
- (20) Gotoh, Y; J Biol Chem 1998, V273, P17477 HCAPLUS
- (21) Guyton, K; Br Med Bull 1993, V49, P523 HCAPLUS
- (22) Harvey, K; J Cell Biol 2000, V148, P59 HCAPLUS
- (23) Hoeflich, K; Oncogene 1999, V18, P5814 HCAPLUS
- (24) Holland, P; J Biol Chem 1997, V272, P24994 HCAPLUS
- (25) Hunter, T; Cell 1994, V79, P573 HCAPLUS
- (26) Ichijo, H; Oncogene 1999, V18, P6087 HCAPLUS
- (27) Ichijo, H; Science 1997, V275, P90 HCAPLUS
- (28) Ihle, J; Cell 2000, V102, P131 HCAPLUS
- (29) Jacobson, M; Trends Biochem Sci 1996, V21, P83 HCAPLUS
- (30) Jinno, S; EMBO J 1994, V13, P1549 HCAPLUS
- (31) Karin, M; Ann NY Acad Sci 1998, V851, P139 HCAPLUS
- (32) Klaunig, J; Environ Health Perspect 1998, V106(Suppl 1), P289
- (33) Ko, L; Genes Dev 1996, V10, P1054 HCAPLUS
- (34) Krupitza, G; Cell Death Differ 1998, V5, P758 HCAPLUS
- (35) Leppa, S; Oncogene 1999, V18, P6158 HCAPLUS
- (36) Li, N; FASEB J 1999, V13, P1137 HCAPLUS
- (37) Liu, H; Mol Cell Biol 2000, V20, P2198 HCAPLUS
- (38) Lopez-Girona, A; Nature 1999, V397, P172 HCAPLUS
- (39) Mailand, N; Science 2000, V288, P1425 MEDLINE
- (40) Mercurio, F; Curr Opin Cell Biol 1999, V11, P226 HCAPLUS
- (41) Migliaccio, E; Nature 1999, V402, P309 HCAPLUS
- (42) Moriguchi, T; EMBO J 1997, V16, P7045 HCAPLUS

- (43) Moriguchi, T; J Biol Chem 1996, V271, P13675 HCAPLUS
- (44) Nagata, A; New Biol 1991, V3, P959 HCAPLUS
- (45) Nishitoh, H; Mol Cell 1998, V2, P389 HCAPLUS
- (46) Ono, K; Cell Signal 2000, V12, P1 HCAPLUS
- (47) Parsons, R; Curr Opin Oncol 1998, V10, P88 HCAPLUS
- (48) Peng, C; Science 1997, V277, P1501 HCAPLUS
- (49) Raingeaud, J; Mol Cell Biol 1996, V16, P1247 HCAPLUS
- (50) Reed, S; Cancer Surv 1997, V29, P7 HCAPLUS
- (51) Sadhu, K; Proc Natl Acad Sci 1990, V87, P5139 HCAPLUS
- (52) Saha, P; Mol Cell Biol 1997, V17, P4338 HCAPLUS
- (53) Saitoh, M; EMBO J 1998, V17, P2596 HCAPLUS
- (54) Sanchez, I; Nature 1994, V372, P794 HCAPLUS
- (55) Sanchez, Y; Science 1997, V277, P1497 HCAPLUS
- (56) Shen, Z; Mutat Res 1996, V364, P81 HCAPLUS
- (57) Sherr, C; Genes Dev 1999, V13, P1501 HCAPLUS
- (58) Stein, B; J Biol Chem 1996, V271, P11427 HCAPLUS
- (59) Tournier, C; Proc Natl Acad Sci 1997, V94, P7337 HCAPLUS
- (60) Toyokuni, S; Biotherapy 1998, V11, P147 HCAPLUS
- (61) Vigo, E; Mol Cell Biol 1999, V19, P6379 HCAPLUS
- (62) Wang, X; J Biol Chem 1996, V271, P31607 HCAPLUS
- (63) Wu, W; Cancer Res 1998, V58, P4082 HCAPLUS
- (64) Wu, Z; Mol Cell Biol 1997, V17, P7407 HCAPLUS
- (65) Wuarin, J; Cell 1996, V85, P785 HCAPLUS
- (66) Xia, K; Mol Cell Biol 1999, V19, P4819 HCAPLUS
- (67) Xia, Z; Science 1995, V270, P1326 HCAPLUS
- (68) Yaffe, M; Cell 1997, V91, P961 HCAPLUS
- (69) Yao, F; Hum Gene Ther 1998, V9, P1939 HCAPLUS
- (70) Yao, Z; J Biol Chem 1997, V272, P32378 HCAPLUS
- (71) Zhang, L; Proc Natl Acad Sci 1999, V96, P8511 HCAPLUS

L20 ANSWER 8 OF 10 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 2001:338762 HCAPLUS

DN 134:362292

ED Entered STN: 11 May 2001

TI Methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile

IN Farr, Spencer

PA Phase-1 Molecular Toxicology, USA

SO PCT Int. Appl., 222 pp.

CODEN: PIXXD2

DT Patent

LA English

IC ICM C12Q001-68

ICS G01N033-50

CC 3-4 (Biochemical Genetics)

Section cross-reference(s): 1, 6, 7, 13, 15

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001032928	A2	20010510	WO 2000-US30474	20001103
	WO 2001032928	A3	20020725		
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			

PRAI US 1999-165398P P 19991105
 US 2000-196571P P 20000411

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2001032928	ICM	C12Q001-68
	ICS	G01N033-50
WO 2001032928	ECLA	C12Q001/68M; G01N033/68V

WO 2001032928 ICM C12Q001-68
 ICS G01N033-50
 WO 2001032928 ECLA C12Q001/68M; G01N033/68V

AB The invention discloses methods, gene databases, gene arrays, protein arrays, and devices that may be used to determine the hypersensitivity of individuals to a given agent, such as drug or other chemical, in order to prevent toxic side effects. In one embodiment, methods of identifying hypersensitivity in a subject by obtaining a gene expression profile of multiple genes associated with hypersensitivity of the subject suspected to be hypersensitive, and identifying in the gene expression profile of the subject a pattern of gene expression of the genes associated with hypersensitivity are disclosed. The gene expression profile of the subject may be compared with the gene expression profile of a normal individual and a hypersensitive individual. The gene expression profile of the subject that is obtained may comprise a profile of levels of mRNA or cDNA. The gene expression profile may be obtained by using an array of nucleic acid probes for the plurality of genes associated with hypersensitivity. The expression of the genes predetd. to be associated with hypersensitivity is directly related to prevention or repair of toxic damage at the tissue, organ or system level. Gene databases arrays and apparatus useful for identifying hypersensitivity in a subject are also disclosed.

ST drug hypersensitivity gene expression DNA microarray app

IT Uncoupling protein

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(1, 2 and 3; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

IT Gene, animal

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(11 beta-hydroxysteroid dehydrogenase type II; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

IT Gene, animal

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(12-lipoxygenase; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

IT Metallothioneins

Presenilins

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(1; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

IT Cyclin dependent kinase inhibitors

(1A; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

IT Metallothioneins

Synaptobrevins

Thrombospondins

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(2; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

- IT Connexins
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(30; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Connexins
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(32; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Syntaxins
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(3; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Connexins
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(40; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Bone morphogenetic proteins
Keratins
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(4; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(5-aminolevulinate synthase 2; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(6-C-kine; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(60S ribosomal protein L6; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Keratins
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(6; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Cyclins
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(A, A1; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Apolipoproteins
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(A-I; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Apolipoproteins
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL

(Biological study); PROC (Process)
 (A-II; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

IT Proteins, specific or class
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (ACP (acyl-carrier); methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

IT Transport proteins
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (ADP/ATP carrier; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

IT Gene, animal
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (ALDH1; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

IT Gene, animal
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (ALDH2; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

IT Transcription factors
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (ATF (activating transcription factor), ATF3 and ATF4; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

IT Transcription factors
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (ATF-2 (activating transcription factor 2); methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

IT Gene, animal
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (ATF4; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

IT Gene, animal
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (ATP dep. helicase II (70kDa); methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

IT Gene, animal
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (ATP dep. helicase II (Ku80); methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

IT Gene, animal
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (ATPase subunit 6; methods of determining individual hypersensitivity to a

- pharmaceutical agent from gene expression profile)
- IT Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(B-myb; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Platelet-derived growth factors
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(B; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(BAG-1; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Multidrug resistance proteins
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(BCRP (breast cancer resistance protein); methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
Transcription factors
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(BRCA1; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Sialoglycoproteins
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(BSP II (bone sialoglycoprotein II); methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(Bak; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(Bax (alpha); methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(Bax; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(Bcl-xL; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Chemokines
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(C-C, C10; methods of determining individual hypersensitivity to a

- pharmaceutical agent from gene expression profile)
- IT Chemokines
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (C-C, I-309; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Apolipoproteins
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (C-III; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Proteins, specific or class
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (C-reactive; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Transcription factors
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (C/EBP (CCAAT box/enhancer element-binding protein), ϵ ; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Transcription factors
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (C/EBP- α (CCAAT box/enhancer element-binding protein α); methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Glycoproteins, specific or class
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (C4bp (complement C4b-binding protein); methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (C5a anaphylatoxin receptor; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Complement receptors
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (C5a; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Proteins, specific or class
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (CAP (adenylate cyclase-associated protein); methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT CD antigens
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (CD82; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Proteins, specific or class
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL

- (Biological study); PROC (Process)
(CHD2 and CIG49; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(CIDEB; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(CLP; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(CTCF; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Chemokine receptors
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(CXCR4; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(CYP1A1; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(CYP4A; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(Chk1; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Lung
(Clara cell; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(Clusterin; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(Csa-19; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Cyclins
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(D1, A1; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Cyclins
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL

- (Biological study); PROC (Process)
(D3; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(DCC (deleted in colorectal cancer); methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(DEAD-box protein p72; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(DNA binding protein inhibitor ID-2; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(DNA dependent helicase; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(DNA dependent protein kinase; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Enzymes, biological studies
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(DNA helicase II; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Enzymes, biological studies
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(DNA helicases; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(DNA ligase IV; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(DNA polymerase alpha; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(DNA repair protein XRCC1; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

- (DNA topoisomerase I; methods of determining individual hypersensitivity to
a
pharmaceutical agent from gene expression profile)
- IT Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
(Biological study); PROC (Process)
(DNA-binding, APRF; methods of determining individual hypersensitivity to a
pharmaceutical agent from gene expression profile)
- IT Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
(Biological study); PROC (Process)
(DNA-binding, p48; methods of determining individual hypersensitivity to a
pharmaceutical agent from gene expression profile)
- IT Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
(Biological study); PROC (Process)
(DNA-binding, zinc finger-containing, ZNF134; methods of determining
individual
hypersensitivity to a pharmaceutical agent from gene expression
profile)
- IT Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
(Biological study); PROC (Process)
(DNA-binding, zinc finger-containing; methods of determining individual
hypersensitivity to a pharmaceutical agent from gene expression
profile)
- IT Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
(Biological study); PROC (Process)
(DOC-2; methods of determining individual hypersensitivity to a
pharmaceutical agent from gene expression profile)
- IT Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
(Biological study); PROC (Process)
(DRA; methods of determining individual hypersensitivity to a pharmaceutical
agent from gene expression profile)
- IT Dopamine receptors
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
(Biological study); PROC (Process)
(D2(short); methods of determining individual hypersensitivity to a
pharmaceutical agent from gene expression profile)
- IT Calbindins
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
(Biological study); PROC (Process)
(D28k; methods of determining individual hypersensitivity to a
pharmaceutical
agent from gene expression profile)
- IT Calbindins
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
(Biological study); PROC (Process)
(D9k; methods of determining individual hypersensitivity to a pharmaceutical
agent from gene expression profile)
- IT Cadherins
Selectins
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
(Biological study); PROC (Process)
(E-; methods of determining individual hypersensitivity to a pharmaceutical
agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL

- (Biological study); PROC (Process)
(E-cadherin; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Transcription factors
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(E2F1; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Apolipoproteins
Cyclins
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(E; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(ELAV-like neuronal protein-2; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(ERA-B; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(ERCC-5; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(ERCC1; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(ERCC3; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(ERp72; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
Transcription factors
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(Egr-1; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(FEN-1; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(FIC1; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

IT Gene, animal

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(FYN proto-oncogene; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

IT Transcription factors

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(Fra-1; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

IT Gene, animal

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(G/T mismatch binding protein; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

IT Cyclins

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(G1, cyclin G1 interacting protein; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

IT Gene, animal

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(G6PD; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

IT Cyclins

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(G; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

IT Proteins, specific or class

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(GAS-7, GCLR, and GCLS; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

IT Gene, animal

Transcription factors

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(GOS24; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

IT Proteins, specific or class

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(GRP (glucose-regulated protein), glucose-regulated protein 170; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

IT Proteins

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(GRP58 (glucose-regulated protein, 58 kDa); methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

- IT Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(GRP78 (glucose-regulated protein, 78,000-mol-weight); methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(GRP94; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(GT mismatch binding protein; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(Gadd153; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(Gadd45; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(Garg-16; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Ferritins
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(H chain; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Glycoproteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(H-CAM (homing cell adhesion mol.); methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Cadherins
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(H-cadherins; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Histones
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(H2A; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Histones
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(H2B; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(HDLCL1; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Transcription factors
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(HIF-1 (hypoxia-inducible factor 1), α ; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(HMG CoA reductase; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT High-mobility group proteins
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(HMG1; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Transcription factors
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(HNF-4 (hepatocyte nuclear factor 4); methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(HNF4; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Heat-shock proteins
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(HSP 27; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Heat-shock proteins
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(HSP 47; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Heat-shock proteins
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(HSP 70; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Heat-shock proteins
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(HSP 90; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Heat-shock proteins
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(HSP12; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal

- RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(HSP70; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(Hsp90; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(I, II and III subunits for cytochrome oxidase; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Synaptotagmin
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(I; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Cell adhesion molecules
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(ICAM-1 (intercellular adhesion mol. 1); methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Cell adhesion molecules
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(ICAM-2 (intercellular adhesion mol. 2); methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Cell adhesion molecules
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(ICAM-3 (intercellular adhesion mol. 3); methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(ICE RelII; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(ID-1; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Metallothioneins
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(IG; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Insulin-like growth factor-binding proteins
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(IGF-BP-1; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

- IT Insulin-like growth factor-binding proteins
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(IGF-BP-2; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Insulin-like growth factor-binding proteins
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(IGF-BP-3; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Insulin-like growth factor-binding proteins
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(IGF-BP-5; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Synaptophysin
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(II; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(IL1B; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(IRF-7; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(ISG-15; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Transcription factors
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(ISGF-3 (interferon-stimulated gene factor 3); methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Transcription factors
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(Id2 (inhibitor of differentiation 2); methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Immunoglobulin receptors
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(IgG type I; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(IkB-a; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL

(Biological study); PROC (Process)
 (IL-13; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

IT Gene, animal
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (IL-8; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

IT Phosphoproteins
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (I κ B- α (inhibitor of RNA formation factor NF- κ B, α); methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

IT Gene, animal
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (JNK1; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

IT Proteins, specific or class
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (Jagged 1 and Jagged 2; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

IT Proteins, specific or class
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (JunD; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

IT Cadherins
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (K-; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

IT Keratins
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (K17; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

IT Proteins, specific or class
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (Ki67; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

IT Liver
 (Kupffer cell; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

IT Proteins, specific or class
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (L-FABP (liver fatty acid-binding protein); methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

IT Proteins, specific or class

- RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(L09604; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Ribosomal proteins
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(L13; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Ribosomal proteins
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(L13A and L37a; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Ribosomal proteins
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(L34; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Ribosomal proteins
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(L6; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Lipoprotein receptors
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(LDL, low d. Lipoprotein; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(Liposin; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(MAD related protein 2; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(MAP kinase; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Cytokines
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(MBP (major basic protein); methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(MCL-1; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
Multidrug resistance proteins
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(MDR1; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

IT Multidrug resistance proteins
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(MDR2; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

IT P-glycoproteins
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(MDR3; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

IT Transcription factors
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(MEF-2 (myocyte-specific enhancer element-binding factor 2); methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

IT Histocompatibility antigens
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(MHC (major histocompatibility complex), MHC class II transactivator; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

IT Histocompatibility antigens
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(MHC (major histocompatibility complex), class I; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

IT Histocompatibility antigens
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(MHC (major histocompatibility complex), class II; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

IT Gene, animal
Proteins, specific or class
Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(MLH1; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

IT Multidrug resistance proteins
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(MRP4; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(MSH2; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

IT Proteins, specific or class

- RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(MSH2M; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(MSH3 gene; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(MSH3; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Transcription factors
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(MTF-1 (metal-regulatory transcription factor 1); methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(Mcl-1 (myeloid cell leukemia sequence-1); methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(Mim; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(MnSOD; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Antigens
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(Mr 110,000; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Cadherins
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(N-; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Cell adhesion molecules
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(N-CAM; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(NADH oxidoreductase subunit MWFE; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Antigens

- RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(NCA (nonspecific crossreactive antigen); methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Transcription factors
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(NF-A2 (nuclear factor A2); methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Transcription factors
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(NF-E2 (nuclear factor erythroid 2), NF-E2; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Transcription factors
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(NF-III (nuclear factor III); methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Transcription factors
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(NF-IV (nuclear factor IV); methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Transcription factors
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(NF-κB (nuclear factor κB); methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(NMB; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Antigens
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(NY-LU-12; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Steroid receptors
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(Ner-1S; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Notch (receptor)
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(Notch1; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(Nucleosome assembly protein; methods of determining individual

- hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Cadherins
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (OB-cadherin 1; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Proteins, specific or class
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (OTK27; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
 Proteins, specific or class
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (OX40 ligand; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Cadherins
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (P-; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Glycoproteins, specific or class
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (P170; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Proteins, specific or class
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (P311; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Proteins, specific or class
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (PABP (poly(A)-binding protein); methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (PAPS synthetase; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (PARP; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Proteins, specific or class
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (PBX2; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Proteins, specific or class
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL

- (Biological study); PROC (Process)
(PCDH7; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(PCNA; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(PDGF associated protein; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Cell adhesion molecules
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(PECAM-1; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(PEG3; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(PIC1; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(PMS2; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(PTEN/MMAC1; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Nerve
(Purkinje cell; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(RAD 51; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(RAD23; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

- (RAD50; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (RAD51 homolog; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (RAD52; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
 Proteins, specific or class
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (RAD; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Proteins, specific or class
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (RAG-1 (recombination-activating gene, 1); methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (RANTES; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Proteins, specific or class
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (RAP1A; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Retinoic acid receptors
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (RAR- β ; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Retinoic acid receptors
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (RAR- γ ; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT DNA formation factors
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (RF-A (replication factor A); methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT DNA formation factors
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (RF-C (replication factor C); methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Ribonucleoproteins
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (RNA U1-containing, C; methods of determining individual hypersensitivity to a

- pharmaceutical agent from gene expression profile)
- IT Enzymes, biological studies
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (RNA-unwinding, helicases; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (RPS21, RPS24, RPS4X and S7; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Retinoid X receptors
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (RXR α ; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Retinoid X receptors
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (RXR β ; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Retinoid X receptors
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (RXR γ ; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (Rad50; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Transcription factors
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (Rb, p107; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Transcription factors
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (Rb; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
 Proteins, specific or class
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (Ref-1; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Proteins, specific or class
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (Rel-B; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (Retinoid X receptor alpha; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

- IT Ribosomal proteins
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(S12; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Ribosomal proteins
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(S21, S7 and RPS24; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Ribosomal proteins
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(S4, X-linked; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Ribosomal proteins
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(S4; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Ribosomal proteins
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(S9; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(SAA1 (serum amyloid A1); methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(SAA2 (serum amyloid A2); methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(SAA3 (serum amyloid A3); methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Glycophosphoproteins
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(SCP2 (hydroxy steroid-carrier protein 2); methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Sialoglycoproteins
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(SGP-2 (sulfoglycoprotein 2); methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Transcription factors
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(SII; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

- (SMT3A and SMT3B; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Proteins, specific or class
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (SOCS-1 (suppressor of cytokine signaling-1); methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Proteins, specific or class
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (SOCS-3 (suppressor of cytokine signaling-3); methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
 Proteins, specific or class
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (SQM1; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Transcription factors
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (SRE-BP (steroid-responsive element-binding protein), 2; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Transcription factors
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (SRF (serum response factor); methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Transcription factors
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (STAT1; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Transcription factors
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (STAT2; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
 Transcription factors
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (STAT3; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Proteins, specific or class
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (Sec23B; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (Sod; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Proteins, specific or class

- RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(SoxS; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(T cell activation gene 3; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(T-cell cyclphilin; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Transcription factors
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(TCF-1 (T-cell factor 1); methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Transcription factors
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(TFIID (transcription factor IID); methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(TP53; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(TRADD; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(TRAF2 (tumor necrosis factor receptor-associated factor 2); methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(UCP2; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(UDP-glucuronosyltransferase 2B; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Annexins
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(V; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

- agent from gene expression profile)
- IT Transport proteins
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (VACHT (vesicular acetylcholine transporter); methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Cell adhesion molecules
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (VCAM-1; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (VCAM1; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Transport proteins
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (VMAT; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Proteins, specific or class
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (Wnt-13; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (XP-C; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Proteins, specific or class
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (XRCC1; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Proteins, specific or class
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (ZO-1; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Proteins, specific or class
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (acute-phase, Major acute phase protein alpha-1; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (acyl CoA dehydrogenase; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (adenine nucleotide translocator 1; methods of determining individual

- hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(alc. dehydrogenase 2; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(alc. dehydrogenase 4; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(alpha-1 acid glycoprotein; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(alpha-2 macroglobulin; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(alpha-catenin; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(alpha-tubulin; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Macrophage inflammatory protein 2
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(alpha; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Macrophage
(alveolar; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(amyloid homolog; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(annexin V; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Integrins
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(antigens CD11a; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

- (antiquitin; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(apolipoprotein AII; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(apolipoprotein CIII; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- a
- IT Cell cycle
(arrest, genes associated with; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Heart, disease
(arrhythmia; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(aspartate aminotransferase; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(ataxia telangeictasia; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- to
- IT Phagocytosis
(autophagocytosis, genes associated with; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(bcl-2; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(bcl-3; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Natural products, pharmaceutical
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(belladonna; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(beta actin; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Potassium channel
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL

- (Biological study); PROC (Process)
(beta subunit; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Transport proteins
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(bile acid-sodium-cotransporting; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Transport proteins
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(bile acid-transporting, bile salt export pump; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Biliary tract
to (bile duct, epithelium; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(bilirubin UDP-glucuronosyltransferase isoenzyme 1; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(biliverdin reductase; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Spreading
(biol., genes associated with; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Macromolecular compounds
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(biol., prevention or repair of toxic damage of; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Neurotrophic factors
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(brain-derived; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(branched chain acyl-CoA oxidase; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(c-Ha-ras; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(c-abl; methods of determining individual hypersensitivity to a

- pharmaceutical agent from gene expression profile)
- IT Gene, animal
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (c-erbB2; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (c-fms; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
 Transcription factors
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (c-fos; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
 Transcription factors
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (c-jun; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Transcription factors
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (c-myb; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Proteins, specific or class
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (c-myc binding protein; methods of determining individual hypersensitivity to
 to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (c-myc; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (calbindin D; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (calnexin; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Proteins, specific or class
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (calprotectins; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (calreticulin-B; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal

- RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(calreticulin; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(carnitine palmitoyl CoA transferase; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(caspase 1; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(caspase 3; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(caspase 7; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(caspase 8; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(catalase; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(catechol-O-Me transferase; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(cathepsin L; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Phosphoproteins
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(caveolins, Caveolin-1; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(cdk4; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Connective tissue
(cell; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

- agent from gene expression profile)
- IT Heart
Lung
(cells of; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Toxicity
(cellular, genes associated with; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(ceruloplasmin; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Biliary tract
(cholestasis; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Rhythm, biological
(circadian, genes associated with; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(clone 22 mRNA, alpha-1 splice variant; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(clone RP-11-468G5; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Collagens, biological studies
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(collagen-alginate; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(collagenase type I interstitial; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Intestine
(colon; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(colony stimulating factor 1; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Estrogens
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(conjugated; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

- (connexin 32; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (connexin 40; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (creatine kinase B; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (cyclin D3; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (cyclin G; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (cyclin dependent kinase inhibitor p27kip1; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (cytochrome c oxidase subunit IV; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Mitochondria
 (damage, genes associated with; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT DNA
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (damage, prevention; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Cell differentiation
 (de-differentiation, genes associated with; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Cytokine receptors
 Gene, animal
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (death receptor 5; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Proteins, specific or class
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (defender against cell death 1; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

- profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(defender against cell death-1; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(delta like; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Mental disorder
(dementia; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Hematopoiesis
(disorder, myelosuppression; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Elongation factors (protein formation)
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(eEF-1 α , PTI-1; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Glycophosphoproteins
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(endoplasmic; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Blood vessel
(endothelium; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(enolase alpha; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Brain
(ependyma, cells; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Lung
(epithelium, columnar ciliated; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(exchange factor; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(excision repair ERCC3 and ERCC5 and ERCC6; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Kidney, disease
(failure; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Carcinoembryonic antigen

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (family member 2; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

IT Gene, animal
 Receptors
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (farnesol receptor; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

IT Gene, animal
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (fas antigen; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

IT Liver, disease
 (fatty; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

IT Gene, animal
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (ferritin H-chain; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

IT Muscle
 (fiber; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

IT Gene, animal
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (flavin-containing monooxygenase 1; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

IT Proteins, specific or class
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (for γ -interferon inducible early response gene F; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

IT Gene, animal
 Transcription factors
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (fosB; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

IT Gene, animal
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (gamma-glutamyl transpeptidase; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

IT Proteins, specific or class
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (gap junction-specific; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

IT Proteins, specific or class
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

- (gene ERCC1; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Phosphoproteins
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (gene L-myc; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Proteins, specific or class
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (gene RAD52; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Proteins, specific or class
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (gene cdc25; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT DNA formation factors
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (gene dnaC; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Vascular endothelial growth factor receptors
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (gene flt 1; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Phosphoproteins
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (gene fyn; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Transcription factors
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (gene gadd153; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Lipoproteins
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
 (gene ospA; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Proteins, specific or class
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (gene pim-1; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Agranulocytosis
 Apoptosis
 Cell adhesion
 Cell aging
 Cell migration
 Mutation
 Neoplasm
 Recombination, genetic
 Signal transduction, biological
 Teratogenesis
 Transformation, genetic
 (genes associated with; methods of determining individual hypersensitivity to a

- pharmaceutical agent from gene expression profile)
- IT Kidney, disease
(glomerulitis; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(glucosylceramide synthase; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(glutaredoxins; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(glutathione S transferase theta-1; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(glutathione peroxidase; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(glutathione reductase; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(glutathione synthetase; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Cell membrane
(glycoprotein; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Intestine
(goblet cell; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(growth arrest specific protein 1; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(growth arrest specific protein 3; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(growth arrest-specific protein 1; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

- profile)
- IT Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(growth arrest-specific protein 3; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Transcription factors
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(hSNF2b; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(hamartin, hamartin; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Enzymes, biological studies
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(helicase ERCC3; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Transcription factors
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(helicase like; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(heme-binding, 23; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(hepatic lipase; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Liver
(hepatocyte; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Immunophilins
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(homolog ARA9; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Allergy
(hypersensitivity; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(hypoxanthine-guanine phosphoribosyltransferase; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(hypoxia inducible factor 1 alpha; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

- IT Vaccines
(inactivated hepatitis; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(inhibitor of apoptosis protein 1; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(inhibitor of apoptosis protein 2; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Kidney, disease
(injury; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(insulin-like growth factor 1; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(insulin-like growth factor binding protein 1; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(integrin beta-1; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(intercellular adhesion mol.-3; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(interferon inducible protein 15; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Cytokines
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(interferon-inducible IP-10; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(involucrins; methods of determining individual hypersensitivity to a

- pharmaceutical agent from gene expression profile)
- IT Natural products, pharmaceutical
 - RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
 - (ipecac; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Transport proteins
 - RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 - (iron permease FTR1; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Disease, animal
 - (irritation; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Transcription factors
 - RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 - (junB; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Transcription factors
 - RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 - (junD; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Kidney
 - (juxtaglomerular cell; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Animal cell
 - (lakis; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Immunoglobulins
 - RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 - (lambda heavy chain; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Meninges
 - (leptomeninges, cells; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
 - RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 - (leukemia inhibitory factor; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Dyneins
 - RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 - (light chain 1; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
 - RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 - (lipopolysaccharide binding protein; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
 - RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

- (lysyl oxidase; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Chemokines
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (macrophage inflammatory protein 1, alpha and beta; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Macrophage migration inhibitory factor
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (macrophage inflammatory protein 3; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Proteins, specific or class
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (macrophage-stimulating; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Lung
 (macrophage; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Kidney
 (macula densa; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (mannose receptor; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (mdm-2; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Proteins, specific or class
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (membrane; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Animal cell
 (meningotheial; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Kidney
 (mesangium; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Brain
 (mesenchymal, capillary endothelial and fibroblast cells; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Lipids, biological studies
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (metabolism; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (metallothionein-IG; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

IT Aging, animal
 Allergy
 Apparatus
 Astrocyte
 Bone
 Brain
 Bronchodilators
 Computer program
 DNA microarray technology
 Digestive tract
 Dione
 Drugs
 Eye
 Fibroblast
 Gallbladder
 Hepatitis
 Hyperplasia
 Hypertension
 Hypotension
 Immunosuppression
 Inflammation
 Intestine
 Jaundice
 Kidney
 Leukemia
 Leukocyte
 Liver
 Macrophage
 Mast cell
 Muscle
 Mutagenesis
 Necrosis
 Nucleic acid hybridization
 Oligodendrocyte
 Ovary
 Pancreas
 Plantago psyllium
 Podophyllum (plant)
 Sex
 Skin
 Spleen
 Statistical analysis
 Stomach
 Testis
 Thyroid gland
 (methods of determining individual hypersensitivity to a pharmaceutical agent
 from gene expression profile)
 IT Proteins, specific or class
 cDNA
 mRNA
 RL: ANT (Analyte); BPR (Biological process); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); PROC (Process)
 (methods of determining individual hypersensitivity to a pharmaceutical agent
 from gene expression profile)
 IT Androgens
 Polyoxyalkylenes, biological studies
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological

study, unclassified); BIOL (Biological study)
(methods of determining individual hypersensitivity to a pharmaceutical
agent
from gene expression profile)

IT APC protein
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
(Biological study); PROC (Process)
(methods of determining individual hypersensitivity to a pharmaceutical
agent
from gene expression profile)

IT Androgen receptors
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
(Biological study); PROC (Process)
(methods of determining individual hypersensitivity to a pharmaceutical
agent
from gene expression profile)

IT Aromatic hydrocarbon receptors
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
(Biological study); PROC (Process)
(methods of determining individual hypersensitivity to a pharmaceutical
agent
from gene expression profile)

IT Biliproteins
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
(Biological study); PROC (Process)
(methods of determining individual hypersensitivity to a pharmaceutical
agent
from gene expression profile)

IT CD14 (antigen)
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
(Biological study); PROC (Process)
(methods of determining individual hypersensitivity to a pharmaceutical
agent
from gene expression profile)

IT CD44 (antigen)
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
(Biological study); PROC (Process)
(methods of determining individual hypersensitivity to a pharmaceutical
agent
from gene expression profile)

IT CFTR (cystic fibrosis transmembrane conductance regulator)
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
(Biological study); PROC (Process)
(methods of determining individual hypersensitivity to a pharmaceutical
agent
from gene expression profile)

IT Cadherins
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
(Biological study); PROC (Process)
(methods of determining individual hypersensitivity to a pharmaceutical
agent
from gene expression profile)

IT Caldesmon
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
(Biological study); PROC (Process)
(methods of determining individual hypersensitivity to a pharmaceutical
agent
from gene expression profile)

IT Calnexin
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL

(Biological study); PROC (Process)
(methods of determining individual hypersensitivity to a pharmaceutical
agent
from gene expression profile)

IT Calreticulin
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
(Biological study); PROC (Process)
(methods of determining individual hypersensitivity to a pharmaceutical
agent
from gene expression profile)

IT Carcinoembryonic antigen
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
(Biological study); PROC (Process)
(methods of determining individual hypersensitivity to a pharmaceutical
agent
from gene expression profile)

IT Clusterin
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
(Biological study); PROC (Process)
(methods of determining individual hypersensitivity to a pharmaceutical
agent
from gene expression profile)

IT Cyclophilins
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
(Biological study); PROC (Process)
(methods of determining individual hypersensitivity to a pharmaceutical
agent
from gene expression profile)

IT Dynamin
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
(Biological study); PROC (Process)
(methods of determining individual hypersensitivity to a pharmaceutical
agent
from gene expression profile)

IT Eotaxin
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
(Biological study); PROC (Process)
(methods of determining individual hypersensitivity to a pharmaceutical
agent
from gene expression profile)

IT Erythropoietin receptors
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
(Biological study); PROC (Process)
(methods of determining individual hypersensitivity to a pharmaceutical
agent
from gene expression profile)

IT Estrogen receptors
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
(Biological study); PROC (Process)
(methods of determining individual hypersensitivity to a pharmaceutical
agent
from gene expression profile)

IT Fas antigen
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
(Biological study); PROC (Process)
(methods of determining individual hypersensitivity to a pharmaceutical
agent
from gene expression profile)

IT Fas ligand
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL

(Biological study); PROC (Process)
(methods of determining individual hypersensitivity to a pharmaceutical
agent
from gene expression profile)

IT Fibronectin receptors
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
(Biological study); PROC (Process)
(methods of determining individual hypersensitivity to a pharmaceutical
agent
from gene expression profile)

IT Filaggrin
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
(Biological study); PROC (Process)
(methods of determining individual hypersensitivity to a pharmaceutical
agent
from gene expression profile)

IT Filamin
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
(Biological study); PROC (Process)
(methods of determining individual hypersensitivity to a pharmaceutical
agent
from gene expression profile)

IT Gelsolin
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
(Biological study); PROC (Process)
(methods of determining individual hypersensitivity to a pharmaceutical
agent
from gene expression profile)

IT Glucocorticoid receptors
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
(Biological study); PROC (Process)
(methods of determining individual hypersensitivity to a pharmaceutical
agent
from gene expression profile)

IT Gonadotropins
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
(Biological study); PROC (Process)
(methods of determining individual hypersensitivity to a pharmaceutical
agent
from gene expression profile)

IT Hemopexins
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
(Biological study); PROC (Process)
(methods of determining individual hypersensitivity to a pharmaceutical
agent
from gene expression profile)

IT Hepatocyte growth factor
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
(Biological study); PROC (Process)
(methods of determining individual hypersensitivity to a pharmaceutical
agent
from gene expression profile)

IT Hepatocyte growth factor receptors
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
(Biological study); PROC (Process)
(methods of determining individual hypersensitivity to a pharmaceutical
agent
from gene expression profile)

IT Interleukin 10
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL

(Biological study); PROC (Process)
(methods of determining individual hypersensitivity to a pharmaceutical
agent
from gene expression profile)

IT Interleukin 12
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
(Biological study); PROC (Process)
(methods of determining individual hypersensitivity to a pharmaceutical
agent
from gene expression profile)

IT Interleukin 13
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
(Biological study); PROC (Process)
(methods of determining individual hypersensitivity to a pharmaceutical
agent
from gene expression profile)

IT Interleukin 18
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
(Biological study); PROC (Process)
(methods of determining individual hypersensitivity to a pharmaceutical
agent
from gene expression profile)

IT Interleukin 1 α
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
(Biological study); PROC (Process)
(methods of determining individual hypersensitivity to a pharmaceutical
agent
from gene expression profile)

IT Interleukin 1 β
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
(Biological study); PROC (Process)
(methods of determining individual hypersensitivity to a pharmaceutical
agent
from gene expression profile)

IT Interleukin 2
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
(Biological study); PROC (Process)
(methods of determining individual hypersensitivity to a pharmaceutical
agent
from gene expression profile)

IT Interleukin 3
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
(Biological study); PROC (Process)
(methods of determining individual hypersensitivity to a pharmaceutical
agent
from gene expression profile)

IT Interleukin 4
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
(Biological study); PROC (Process)
(methods of determining individual hypersensitivity to a pharmaceutical
agent
from gene expression profile)

IT Interleukin 5
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
(Biological study); PROC (Process)
(methods of determining individual hypersensitivity to a pharmaceutical
agent
from gene expression profile)

IT Interleukin 6
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL

(Biological study); PROC (Process)
(methods of determining individual hypersensitivity to a pharmaceutical
agent
from gene expression profile)

IT Interleukin 8
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
(Biological study); PROC (Process)
(methods of determining individual hypersensitivity to a pharmaceutical
agent
from gene expression profile)

IT Lactoferrins
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
(Biological study); PROC (Process)
(methods of determining individual hypersensitivity to a pharmaceutical
agent
from gene expression profile)

IT Leukemia inhibitory factor
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
(Biological study); PROC (Process)
(methods of determining individual hypersensitivity to a pharmaceutical
agent
from gene expression profile)

IT Lymphotoxin
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
(Biological study); PROC (Process)
(methods of determining individual hypersensitivity to a pharmaceutical
agent
from gene expression profile)

IT Macrophage colony-stimulating factor receptors
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
(Biological study); PROC (Process)
(methods of determining individual hypersensitivity to a pharmaceutical
agent
from gene expression profile)

IT Mannose receptors
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
(Biological study); PROC (Process)
(methods of determining individual hypersensitivity to a pharmaceutical
agent
from gene expression profile)

IT Mdm2 protein
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
(Biological study); PROC (Process)
(methods of determining individual hypersensitivity to a pharmaceutical
agent
from gene expression profile)

IT Monocyte chemoattractant protein-1
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
(Biological study); PROC (Process)
(methods of determining individual hypersensitivity to a pharmaceutical
agent
from gene expression profile)

IT Multidrug resistance proteins
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
(Biological study); PROC (Process)
(methods of determining individual hypersensitivity to a pharmaceutical
agent
from gene expression profile)

IT Myelin basic protein
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL

(Biological study); PROC (Process)
(methods of determining individual hypersensitivity to a pharmaceutical
agent
from gene expression profile)

IT Neurofibromin
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
(Biological study); PROC (Process)
(methods of determining individual hypersensitivity to a pharmaceutical
agent
from gene expression profile)

IT Osteocalcins
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
(Biological study); PROC (Process)
(methods of determining individual hypersensitivity to a pharmaceutical
agent
from gene expression profile)

IT Osteonectin
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
(Biological study); PROC (Process)
(methods of determining individual hypersensitivity to a pharmaceutical
agent
from gene expression profile)

IT Osteopontin
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
(Biological study); PROC (Process)
(methods of determining individual hypersensitivity to a pharmaceutical
agent
from gene expression profile)

IT Oxytocin receptors
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
(Biological study); PROC (Process)
(methods of determining individual hypersensitivity to a pharmaceutical
agent
from gene expression profile)

IT Potassium channel
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
(Biological study); PROC (Process)
(methods of determining individual hypersensitivity to a pharmaceutical
agent
from gene expression profile)

IT Prion proteins
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
(Biological study); PROC (Process)
(methods of determining individual hypersensitivity to a pharmaceutical
agent
from gene expression profile)

IT Probes (nucleic acid)
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
(Biological study); PROC (Process)
(methods of determining individual hypersensitivity to a pharmaceutical
agent
from gene expression profile)

IT Progesterone receptors
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
(Biological study); PROC (Process)
(methods of determining individual hypersensitivity to a pharmaceutical
agent
from gene expression profile)

IT Proliferating cell nuclear antigen
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL

(Biological study); PROC (Process)
(methods of determining individual hypersensitivity to a pharmaceutical
agent
from gene expression profile)

IT Prostate-specific antigen
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
(Biological study); PROC (Process)
(methods of determining individual hypersensitivity to a pharmaceutical
agent
from gene expression profile)

IT RANTES (chemokine)
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
(Biological study); PROC (Process)
(methods of determining individual hypersensitivity to a pharmaceutical
agent
from gene expression profile)

IT Stem cell factor
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
(Biological study); PROC (Process)
(methods of determining individual hypersensitivity to a pharmaceutical
agent
from gene expression profile)

IT TCR (T cell receptors)
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
(Biological study); PROC (Process)
(methods of determining individual hypersensitivity to a pharmaceutical
agent
from gene expression profile)

IT Tau factor
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
(Biological study); PROC (Process)
(methods of determining individual hypersensitivity to a pharmaceutical
agent
from gene expression profile)

IT Tenascins
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
(Biological study); PROC (Process)
(methods of determining individual hypersensitivity to a pharmaceutical
agent
from gene expression profile)

IT Thioredoxins
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
(Biological study); PROC (Process)
(methods of determining individual hypersensitivity to a pharmaceutical
agent
from gene expression profile)

IT Thrombin receptors
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
(Biological study); PROC (Process)
(methods of determining individual hypersensitivity to a pharmaceutical
agent
from gene expression profile)

IT Thrombomodulin
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
(Biological study); PROC (Process)
(methods of determining individual hypersensitivity to a pharmaceutical
agent
from gene expression profile)

IT Transcortins
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL

(Biological study); PROC (Process)
(methods of determining individual hypersensitivity to a pharmaceutical
agent
from gene expression profile)

IT Transferrin receptors
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
(Biological study); PROC (Process)
(methods of determining individual hypersensitivity to a pharmaceutical
agent
from gene expression profile)

IT Transferrins
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
(Biological study); PROC (Process)
(methods of determining individual hypersensitivity to a pharmaceutical
agent
from gene expression profile)

IT Transforming growth factors
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
(Biological study); PROC (Process)
(methods of determining individual hypersensitivity to a pharmaceutical
agent
from gene expression profile)

IT Transthyretin
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
(Biological study); PROC (Process)
(methods of determining individual hypersensitivity to a pharmaceutical
agent
from gene expression profile)

IT Tropoelastins
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
(Biological study); PROC (Process)
(methods of determining individual hypersensitivity to a pharmaceutical
agent
from gene expression profile)

IT Tumor necrosis factors
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
(Biological study); PROC (Process)
(methods of determining individual hypersensitivity to a pharmaceutical
agent
from gene expression profile)

IT Urokinase-type plasminogen activator receptors
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
(Biological study); PROC (Process)
(methods of determining individual hypersensitivity to a pharmaceutical
agent
from gene expression profile)

IT Vimentins
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
(Biological study); PROC (Process)
(methods of determining individual hypersensitivity to a pharmaceutical
agent
from gene expression profile)

IT Vitellogenins
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
(Biological study); PROC (Process)
(methods of determining individual hypersensitivity to a pharmaceutical
agent
from gene expression profile)

IT neu (receptor)
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL

(Biological study); PROC (Process)
 (methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

IT p53 (protein)
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

IT Neuroglia
 (microglia cells; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

IT Proteins, specific or class
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (mig-2Or; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

IT Gene, animal
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (monocyte chemotactic protein-1; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

IT Proteins, specific or class
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (mss4; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

IT Proteins, specific or class
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (mtal; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

IT Gene, animal
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (myelin basic protein; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

IT Proteins, specific or class
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (myeloid cell differentiation protein-1; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

IT Proteins, specific or class
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (natural killer cell-enhancing factor B; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

IT Proteins, specific or class
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (natural killer enhancing factor A; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

IT Gene, animal

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(neomycin; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

IT Kidney, disease

(nephritis; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

IT Toxicity

(nephrotoxicity; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

IT Endocrine system

(neuroendocrine system, cell; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

IT Nerve

(neuron; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

IT Toxins

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(neurotoxins; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

IT Agranulocytosis

(neutropenia; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

IT Gene, animal

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(nucleic acid binding protein; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

IT Animal cell

Blood

Blood serum

Urine

(nucleic acid or protein expression profile from; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

IT Proteins, specific or class

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(nucleic acid-binding; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

IT Gene, animal

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(nucleoside diphosphate kinase beta isoform; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

IT Gene, animal

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(octamer binding protein 1; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

IT Gene, animal

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(oncosis associated; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(organic anion transporter 1; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Transport proteins
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(organic anion-transporting; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(ornithine decarboxylase; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(osteopontin; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(oxygen regulated protein 150; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(oxysterol binding protein; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Cyclin dependent kinase inhibitors
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(p16INK4; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(p190-B; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Ras proteins
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(p21c-Ha-ras; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Cyclin dependent kinase inhibitors
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(p21CIP1/WAF1; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Cyclin dependent kinase inhibitors
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(p27KIP1; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

- IT Tumor necrosis factor receptors
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(p55; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(p55CDC; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Tumor necrosis factor receptors
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(p75; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Pancreas, disease
(pancreatitis, genes associated with; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(pancreatitis-associated protein; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Insecticides
(pediculicides; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(penicillin band 109-A-2; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(penicillin band 117-B-2; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(penicillin band 134-A-2; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(penicillin band 134-A-4; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(penicillin band 149-B-3; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(penicillin band 239-A-2; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL

(Biological study); PROC (Process)
(penicillin band 240-A-4; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(penicillin band 244-A-2; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(penicillin band 69-B-3; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(penicillin band 77-C-2; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

IT Nerve, disease
(peripheral neuropathy; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

IT Proteoglycans, biological studies
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(perlecan; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(peroxisomal 3-oxoacyl-CoA thiolase; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(peroxisomal acyl-CoA oxidase; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(peroxisomal enoyl-CoA hydratase: 3-hydroxyacyl-CoA dehydrogenase; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

IT Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(peroxisome assembly factor 1; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

IT Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(peroxisome assembly factor 2; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

- (peroxisome assembly factor-1; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(peroxisome biogenesis disorder protein 11; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(peroxisome biogenesis disorder protein 1; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(peroxisome biogenesis disorder protein 4; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(phenol sulfotransferase; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(phenylalanine hydroxylase; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(phosphoenolpyruvate carboxykinase; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(phosphoglycerate kinase; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(phospholipase A2; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Glycoproteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(plasma cell membrane; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(plasminogen activator inhibitor 2; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

- IT Gene, animal
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (platelet/endothelial cell adhesion mol.-1; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Animal tissue
 Organ, animal
 Organelle
 (prevention or repair of toxic damage of; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Nucleotides, biological studies
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (prevention or repair of toxic damage of; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Collagens, biological studies
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (procollagens, type I, alpha 1; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (prohibitin; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Proteins, specific or class
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (prohibitins; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Peroxisome
 (proliferation, genes associated with; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Proteins, specific or class
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (proline-rich; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (prostaglandin H synthase; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (protein tyrosine phosphatase; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Proteins, general, biological studies
 RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)
 (proteinuria; methods of determining individual hypersensitivity to a

- pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(prothymosin, alpha; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(psoriasin, 1; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Antibiotics
(quinolone, fluoroquinolones; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Intestine
(rectum; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Cytokines
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(release' genes associated with; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(retinoic acid receptor gamma 1; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(retinol binding protein, CRBP-I (cellular retinol binding protein I); methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(retinol binding protein, CRBP-II (cellular retinol binding protein II); methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Eye, disease
(retinopathy; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(senescence marker protein-30; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Animal cell
(serous and brush; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(silencer of death domain; methods of determining individual hypersensitivity

- to a pharmaceutical agent from gene expression profile)
- IT Vein
(sinusoidal, hepatic venule endothelial cells; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Ribonucleoproteins
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(small nuclear RNA-containing, B; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Muscle
(smooth, cells; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Transport proteins
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(sodium taurocholate-cotransporting; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Hedgehog protein
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(sonic; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(spermidine/spermine N1-acetyltransferase; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Disease, animal
(steatosis; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Liver
(stellate cell; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(stromelysin-1; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(survivin; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Phosphoproteins
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(synapsins, I; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Heart, disease
(tachycardia; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(thiol-specific antioxidant protein; methods of determining individual

- hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(thioredoxin; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(thymidine kinase; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(thymidylate synthase; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Heart
Kidney
Liver
Nerve
(toxicity; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(transferrin receptor; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(transferrin; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(transthyretin; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(tryptophanyl-tRNA synthetase; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(ts11 gene encoding G1 progression protein; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Lung
(type I cell; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Activin receptors
Collagens, biological studies
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(type II; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(ubiquitin conjugating enzyme; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Enzymes, biological studies
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(ubiquitin-conjugating, G2; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Sterols
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(unsatd., Stanol, esters; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(urokinase plasminogen activator receptor; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(vascular endothelial growth factor receptor 1; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(very-long-chain acyl-CoA-dehydrogenase; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(vimentin; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Epithelium
(visceral, parietal and tubular; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(visinin-like peptide; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(x13694; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(zinc finger protein 37; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Crystallins

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (ζ-crystallins; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

IT Interferons

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
 (α-2b; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

IT Tubulins

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (α-; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

IT Thyroid hormone receptors

α1-Acid glycoprotein

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (α1; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

IT Catenins

Integrins

Interferons

Peroxisome proliferator-activated receptors

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (α; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

IT Macroglobulins

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (α2-; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

IT Microglobulins

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (α2-microglobulins, α-2 microglobulin; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

IT Chemokine receptors

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (β chemokine receptor CCR2; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

IT Chemokine receptors

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (β chemokine receptor CCR5; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

IT Actins

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (β-; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

IT Interferons

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
 (β1; methods of determining individual hypersensitivity to a

- pharmaceutical agent from gene expression profile)
- IT Integrins
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(β1; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Integrins
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(β2; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Integrins
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(β4; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Fibrinogens
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(γ chain; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Actins
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(γ-actins; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Interferons
Peroxisome proliferator-activated receptors
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(γ; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT 9038-14-6, Flavin containing monooxygenase
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(1 and 3; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT 9059-22-7 9076-57-7, Histone deacetylase 52660-18-1 61969-98-0, Bilirubin-UDP-glucuronosyltransferase
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(1; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT 9030-08-4, UDP-glucuronosyltransferase
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(2 and 2B; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT 22916-47-8, Miconazole
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(2% cream; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT 9037-14-3, 5-Aminolevulinate synthase
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(2, gene for; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT 134678-17-4, Lamivudine
RL: BAC (Biological activity or effector, except adverse); BSU (Biological

- study, unclassified); BIOL (Biological study)
(3TC; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT 99011-02-6, Imiquimod
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(5% cream; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT 9001-66-5
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(A and B; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT 9001-60-9, Lactate dehydrogenase
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(B; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT 8064-90-2, Trimeth/sulfa
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(Co-trimoxazole; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT 9015-85-4
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(I and III and IV; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT 9001-16-5, Cytochrome C oxidase
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(I, II and III, gene for; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT 9001-03-0
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(III; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT 79871-54-8, Norgestimate-ethinyl estradiol mixture
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(Norgestimate/ethinyl estradiol; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT 50812-37-8, Glutathione S-transferase
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(Ya, theta-1, and alpha subunit; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT 9014-08-8, Enolase
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(alpha; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT 58-82-2, Bradykinin
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(antagonist; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

- IT 9001-15-4
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(b; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT 76901-00-3, Acetyl, hydrolase
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(beta subunit; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT 66722-44-9, Bisoprolol
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(bisoprolol/HCTZ; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT 9005-32-7, Alginic acid
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(collagen-alginate; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT 7440-57-5, Gold, biological studies
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(compds.; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT 9054-89-1, Superoxide dismutase
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(copper-zinc-containing and manganese-containing; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT 154248-97-2, Imiglucerase
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(injection; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT 56-81-5, Glycerol, biological studies
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(iodinated; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT 50-02-2, Dexamethasone 50-06-6, Phenobarbital, biological studies
50-18-0, Cyclophosphamide 50-23-7, Hydrocortisone 50-24-8, Prednisolone 50-28-2, Estradiol, biological studies 50-44-2, 6-Thiopurine 50-48-6, Amitriptyline 50-55-5, Reserpine 50-76-0, Actinomycin D 50-78-2, Aspirin 51-06-9, Procainamide 51-21-8, Fluorouracil 51-34-3, Scopolamine 51-48-9, Levothyroxine, biological studies 51-49-0, Dextrothyroxine 51-55-8, Atropine, biological studies 51-75-2, Mechlorethamine 52-01-7, Spironolactone 52-53-9, Verapamil 52-67-5, Penicillamine 52-86-8, Haloperidol 53-03-2, Prednisone 53-06-5, Cortisone 53-19-0, Mitotane 53-33-8, Paramethasone 53-86-1, Indomethacin 54-05-7, Chloroquine 54-11-5, Nicotine 54-31-9, Furosemide 54-36-4, Metyrapone 54-85-3, Isoniazid 55-63-0, Nitroglycerin 55-65-2, Guanethidine 55-98-1, Busulfan 56-54-2, Quinidine 56-75-7, Chloramphenicol 57-22-7, Vincristine 57-41-0, Phenytoin 57-53-4, Meprobamate 57-63-6, Ethinyl estradiol 57-66-9, Probenecid 57-83-0, Progestin, biological studies 57-96-5, Sulfinpyrazone 58-05-9, Leucovorin 58-14-0, Pyrimethamine 58-32-2, Dipyrindamole 58-39-9, Perphenazine 58-54-8, Ethacrynic acid 58-55-9,

Theophylline, biological studies 58-61-7, Adenosine, biological studies 58-74-2, Papaverine 58-93-5, Hydrochlorothiazide 58-94-6, Thiazide 59-05-2, Methotrexate 59-42-7, Phenylephrine 59-43-8, Thiamine, biological studies 59-92-7, Levodopa, biological studies 59-99-4, Neostigmine 60-40-2, Mecamylamine 60-54-8, Tetracycline 60-79-7, Ergonovine 60-87-7, Promethazine 61-32-5, Methicillin 61-72-3, Cloxacillin 64-75-5, Tetracycline hydrochloride 64-77-7, Tolbutamide 64-86-8, Colchicine 65-23-6, Pyridoxine 66-79-5, Oxacillin 66-97-7, Psoralen 67-20-9, Nitrofurantoin 67-45-8, Furazolidone 67-68-5, Dimethyl sulfoxide, biological studies 68-22-4D, Norethindrone, mixture with ethinyl estradiol 68-41-7, Cycloserine 68-88-2, Hydroxyzine 69-53-4, Ampicillin 69-72-7, biological studies 69-89-6, Xanthine 73-24-5, 6-Aminopurine, biological studies 73-31-4, Melatonin 76-42-6, Oxycodone 76-57-3, Codeine 77-09-8, Phenolphthalein 77-19-0, Dicyclomine 77-36-1, Chlorthalidone 78-44-4, Carisoprodol 80-08-0, Dapsone 81-23-2, Dehydrocholic acid 81-81-2, Warfarin 82-92-8, Cyclizine 82-95-1, Buclizine 83-43-2, Methylprednisolone 83-73-8, Iodoquinol 83-89-6, Quinacrine 83-98-7, Orphenadrine 86-54-4, Hydralazine 89-57-6, Mesalamine 90-34-6, Primaquine 90-82-4, Pseudoephedrine 91-64-5, Coumarin 92-13-7, Pilocarpine 92-84-2, Phenothiazine 93-14-1, Guaifenesin 94-20-2, Chlorpropamide 94-36-0, Benzoyl peroxide, biological studies 94-78-0, Phenazopyridine 95-25-0, Chlorzoxazone 96-64-0, Soman 97-77-8, Disulfiram 99-66-1, Valproic acid 100-33-4, Pentamidine 100-97-0, Methenamine, biological studies 101-31-5, Hyoscyamine 103-90-2, Acetaminophen 113-18-8, Ethchlorvynol 113-42-8, Methylergonovine 113-45-1, Methylphenidate 114-07-8, Erythromycin 114-86-3, Phenformin 118-42-3, Hydroxychloroquine 122-09-8, Phentermine 123-56-8, Succinimide 123-63-7, Paraldehyde 124-94-7, Triamcinolone 125-29-1, Hydrocodone 125-33-7, Primidone 125-64-4, Methypylon 125-71-3, Dextromethorphan 125-84-8, Aminogluthetamide 126-07-8, Griseofulvin 126-52-3, Ethinamate 127-07-1, Hydroxyurea 127-69-5, Sulfisoxazole 128-13-2, Ursodiol 130-95-0, Quinine 132-17-2, Benztropine 133-10-8, Sodium p-aminosalicylate 137-58-6, Lidocaine 138-56-7, Trimethobenzamide 144-11-6, Trihexyphenidyl 147-52-4, Nafcillin 147-94-4, AraC 148-82-3, Melphalan 154-21-2, Lincomycin 154-42-7, Thioguanine 154-93-8, Carmustine 155-97-5, Pyridostigmine 298-46-4, 5H-Dibenz[b,f]azepine-5-carboxamide 298-50-0, Propantheline 299-42-3, Ephedrine 300-62-9D, Amphetamine, mixed 300-62-9D, Amphetamine, mixed salts 302-17-0, Chloral hydrate 302-79-4, Tretinoin 303-53-7, Cyclobenzaprine 305-03-3, Chlorambucil 315-30-0, Allopurinol 321-64-2, Tacrine 346-18-9, Polythiazide 361-37-5, Methysergide 363-24-6, Dinoprostone 364-62-5, Metoclopramide 378-44-9, Betamethasone 389-08-2, Nalidixic acid 395-28-8, Isoxsuprine 439-14-5, Diazepam 443-48-1, Metronidazole 446-86-6, Azathioprine 456-59-7, Cyclophosphamide 461-72-3, Hydantoin 463-04-7, Amyl nitrite 469-62-5, Propoxyphene 474-25-9, Chenodiol 480-30-8, Dichloralphenazone 484-23-1, Dihydralazine 503-01-5, Isometheptene 512-15-2, Cyclopentolate 520-85-4, Medroxyprogesterone 525-66-6, Propranolol 526-36-3, Xylometazoline 536-33-4, Ethionamide 541-15-1, Levocarnitine 546-88-3, Acetohydroxamic acid 555-30-6, Methyl dopa 564-25-0, Doxycycline 569-65-3, Meclizine 577-11-7, Docusate sodium 596-51-0, Glycopyrrolate 599-79-1, Sulfasalazine 603-50-9, Bisacodyl 634-03-7, Phendimetrazine 637-07-0, Clofibrate 657-24-9, Metformin 671-16-9, Procarbazine 672-87-7, Metyrosine 674-38-4, Bethanechol 723-46-6, Sulfamethoxazole 738-70-5, Trimethoprim 745-65-3, Alprostadil 791-35-5, Chlorthalidone 797-63-7, Levonorgestrel 797-64-8D, L-Norgestrel, ethinyl estradiol mixture 846-49-1, Lorazepam 846-50-4, Temazepam 911-45-5, Clomiphene 915-30-0, Diphenoxylate 962-58-3, Diazoxon 968-93-4, Testolactone 972-02-1, Diphenidol

990-73-8, Fentanyl citrate 1134-47-0, Baclofen 1143-38-0, Anthralin 1321-13-7, Potassium aminobenzoate 1397-89-3, Amphotericin B 1400-61-9, Nystatin 1404-04-2, Neomycin 1404-04-2D, Neomycin, mixture with polymyx/HC 1404-90-6, Vancomycin 1406-05-9, Penicillin 1491-59-4, Oxymetazoline 1622-61-3, Clonazepam 1953-02-2, Tiopronin 1977-10-2, Loxapine 2152-34-3, Pemoline 2152-44-5, Betamethasone valerate 2447-57-6, Sulfadoxine 2451-01-6, Terpin hydrate 2609-46-3, Amiloride 2809-21-4 2998-57-4, Estramustine 3116-76-5, Dicloxacillin 3313-26-6, Thiothixene 3385-03-3, Flunisolide 3485-14-1, Cyclacillin 3737-09-5, Disopyramide

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

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IT 3778-73-2, Iphosphamide 3930-20-9, Sotalol 4205-90-7, Clonidine 4419-39-0, Beclomethasone 4499-40-5, Oxtriphylline, biological studies 4618-18-2, Lactulose 4697-36-3, Carbenicillin 4759-48-2, Isotretinoin 5051-62-7, Guanabenz 5543-57-7, (s)-Warfarin 5633-20-5, Oxybutynin 5786-21-0, Clozapine 6190-39-2, Dihydroergotamine mesylate 6493-05-6, Pentoxifylline 6621-47-2, Perhexiline 7020-55-5, Clidinium 7235-40-7, Beta carotene 7261-97-4, Dantrolene 7416-34-4, Molindone 7439-93-2, Lithium, biological studies 7447-40-7, Potassium chloride, biological studies 7481-89-2, Zalcitabine 7487-88-9, Magnesium sulfate, biological studies 7648-98-8, Ambenonium 7681-11-0, Potassium iodide, biological studies 7681-93-8, Natamycin 7683-59-2, Isoproterenol 8029-99-0, Paregoric 8049-47-6, Pancreatin 8050-81-5, Simethicone 8063-07-8, Kanamycin 8067-24-1, Ergoloid mesylates 9001-27-8, Blood-coagulation factor VIII 9001-75-6, Pepsin 9004-10-8, Insulin, biological studies 9004-67-5, Methyl cellulose 9005-49-6, Enoxaparin, biological studies 9007-92-5, Glucagon, biological studies 9039-53-6, Urokinase 9046-56-4, Ancrod 10118-90-8, Minocycline 10238-21-8, Glyburide 10262-69-8, Maprotiline 10540-29-1, Tamoxifen 11041-12-6, Cholestyramine 11056-06-7, Bleomycin 11111-12-9, Cephalosporin 12174-11-7, Attapulgit 12244-57-4, Gold sodium thiomalate 12650-69-0, Mupirocin 12794-10-4D, Benzodiazepine, derivs. 13010-47-4, Lomustine 13292-46-1, Rifampin 13311-84-7, Flutamide 13392-28-4, Rimantadine 13647-35-3, Trilostane 14028-44-5, Amoxapine 14124-50-6 14611-51-9, Selegiline 14769-73-4, Levamisole 14838-15-4, Phenylpropanolamine 14882-18-9, Bismuth subsalicylate 15301-69-6, Flavoxate 15307-86-5, Diclofenac 15663-27-1, Cisplatin 15686-71-2, Cephalixin 15687-27-1, Ibuprofen 15722-48-2, Olsalazine 16051-77-7, Isosorbide mononitrate 16068-46-5, Potassium phosphate 16110-51-3, Cromolyn 16590-41-3, Naltrexone 16679-58-6, Desmopressin 17230-88-5, Danazol 17784-12-2, Sulfacytine 18323-44-9, Clindamycin 18559-94-9, Albuterol 18883-66-4, Streptozocin 19216-56-9, Prazosin 19794-93-5, Trazodone 20537-88-6, Amifostine 20830-75-5, Digoxin 20830-81-3, Daunomycin 21256-18-8, Oxaprozin 21829-25-4, Nifedipine 22204-53-1, Naproxen 22232-71-9, Mazindol 23031-32-5, Terbutaline sulfate 23214-92-8, Doxorubicin 23288-49-5, Probuco 25322-68-3, Polyethylene glycol 25451-15-4, Felbamate 25614-03-3, Bromocriptine 25812-30-0, Gemfibrozil 26652-09-5, Ritodrine 26787-78-0, Amoxicillin 26807-65-8, Indapamide 26839-75-8, Timolol 27203-92-5, Tramadol 27262-47-1, Levobupivacaine 27686-84-6, Masoprocol 28395-03-1, Bumetanide 28657-80-9, Cinoxacin 28782-42-5, Difenoxin 28860-95-9, Carbidopa 28911-01-5, Triazolam 28981-97-7, Alprazolam 29094-61-9, Glipizide 29110-47-2, Guanfacine 29122-68-7, Atenolol 30516-87-1, Zidovudine 31441-78-8, Mercaptopurine 31677-93-7, Bupropion hydrochloride 31828-71-4, Mexiletine 31883-05-3, Moricizine 32986-56-4, Tobramycin 33069-62-4, Paclitaxel 33419-42-0, Etoposide

34089-81-1, Sodium ferric gluconate 35189-28-7, Norgestimate
 36322-90-4, Piroxicam 36505-84-7, Buspirone 36791-04-5, Ribavirin
 38304-91-5, Minoxidil 40180-04-9, Tienilic acid 40580-59-4, Guanadrel
 41575-94-4, Carboplatin 41708-72-9, Tocainide 42399-41-7, Diltiazem
 42924-53-8, Nabumetone 49562-28-9, Fenofibrate 50679-08-8, Terfenadine
 50925-79-6, Colestipol 50972-17-3, Bacampicillin 51022-71-0, Nabilone
 51110-01-1, Somatostatin 51333-22-3, Budesonide 51384-51-1, Metoprolol
 51481-61-9, Cimetidine 53179-11-6, Loperamide 53230-10-7, Mefloquine
 53608-75-6, Pancrelipase 53714-56-0, Leuprolide 53994-73-3, Cefaclor
 54024-22-5, Desogestrel 54063-53-5, Propafenone 54143-56-5, Flecainide
 acetate 54182-58-0, Sucralfate 54350-48-0, Etretinate 54573-75-0,
 Doxercalciferol 54910-89-3, Fluoxetine 55142-85-3, Ticlopidine
 55268-75-2, Cefuroxime 55985-32-5, Nicardipine 56420-45-2, Epirubicin
 58001-44-8 58581-89-8, Azelastine 59122-46-2, Misoprostol
 59277-89-3, Acyclovir 59729-33-8, Citalopram 59865-13-3, Cyclosporine
 A 60142-96-3, Gabapentin 60205-81-4, Ipratropium 61489-71-2,
 Menotropin 61718-82-9, Fluvoxamine maleate 61869-08-7, Paroxetine
 62571-86-2, Captopril 63585-09-1, Foscarnet sodium 63590-64-7,
 Terazosin 64952-97-2, Latamoxef 65141-46-0, Nicorandil 65277-42-1,
 Ketoconazole 66085-59-4, Nimodipine 66104-22-1, Pergolide
 66357-35-5, Ranitidine 66376-36-1, Alendronate 67227-57-0, Fenoldopam
 mesylate 68475-42-3, Anagrelide 68844-77-9, Astemizole 69049-73-6,
 Nedocromil 69123-98-4, Fialuridine 69655-05-6, Didanosine
 70359-46-5, Brominide tartrate 70989-04-7, S-Mephenytoin 71320-77-9,
 Moclobemide 72432-03-2, Miglitol 72509-76-3, Felodipine 72956-09-3,
 Carvedilol 73590-58-6, Omeprazole 74103-06-3, Ketorolac 74191-85-8,
 Doxazosin 75330-75-5, Lovastatin 75695-93-1, Isradipine 75706-12-6,
 Leflunomide 75847-73-3, Enalapril 76470-66-1, Loracarbef 76547-98-3,
 Lisinopril 76568-02-0, Flosequinan 76584-70-8 76824-35-6, Famotidine
 76932-56-4, Nafarelin 76963-41-2, Nizatidine 78110-38-0, Aztreonam
 78628-80-5, Terbinafine hydrochloride 79516-68-0, Levocabastine
 79617-96-2, Sertraline 79794-75-5, Loratadine 79902-63-9, Simvastatin
 80125-14-0, Remoxipride 80474-14-2, Fluticasone propionate 81093-37-0,
 Pravastatin 81098-60-4, Cisapride 81103-11-9, Clarithromycin
 81669-57-0, Anistreplase 82410-32-0, Ganciclovir 82419-36-1, Ofloxacin
 82626-48-0, Zolpidem 82834-16-0, Perindopril 83366-66-9, Nefazodone
 83799-24-0, Fexofenadine 83881-51-0, Cetirizine 83905-01-5,
 Azithromycin 84057-84-1, Lamotrigine 84449-90-1, Raloxifene
 84625-61-6, Itraconazole 85441-61-8, Quinapril 85721-33-1,
 Ciprofloxacin 86386-73-4, Fluconazole 86541-75-5, Benazepril
 87333-19-5, Ramipril 87679-37-6, Trandolapril 88040-23-7, Cefepime
 88150-42-9, Amlodipine 89365-50-4, Salmeterol 89778-26-7, Toremifene
 90566-53-3, Fluticasone 91714-94-2, Bromfenac

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IT 92665-29-7, Cefprozil 93390-81-9, Fosphenytoin 93413-69-5, Venlafaxine
 93479-97-1, Glimepiride 93957-54-1, Fluvastatin 95058-81-4,
 Gemcitabine 95233-18-4, Atovaquone 96036-03-2, Meropenem 97322-87-7,
 Troglitazone 97519-39-6, Ceftibuten 97534-21-9, Merbarone
 97682-44-5, Irinotecan 98048-97-6, Fosinopril 98319-26-7, Finasteride
 100986-85-4, Levofloxacin 102767-28-2, Levetiracetam 103577-45-3,
 Lansoprazole 103628-46-2, Sumatriptan 104227-87-4, Famciclovir
 104632-26-0, Pramipexole 105102-22-5, Mometasone 105462-24-6
 105857-23-6, Alteplase 106133-20-4, Tamsulosin 106266-06-2,
 Risperidone 106392-12-5, Poloxamer 188 106650-56-0, Sibutramine
 107753-78-6, Zafirlukast 107868-30-4, Exemestane 109889-09-0,
 Granisetron 111025-46-8, Pioglitazone 112809-51-5, Letrozole

112965-21-6, Calcipotriene 114798-26-4, Losartan 115103-54-3, Tiagabine 115956-13-3, Dolasetron mesylate 116644-53-2, Mibefradil 117976-89-3, Rabeprazole 119383-00-5 119914-60-2, Grepafloxacin 120014-06-4, Donepezil 121679-13-8, Naratriptan 122320-73-4, Rosiglitazone 122647-32-9, Ibutilide fumarate 122852-42-0, Alosetron 123948-87-8, Topotecan 124937-51-5, Tolterodine 126040-58-2, Calcium polycarbophil 127779-20-8, Saquinavir 129311-55-3, Ganirelix acetate 129318-43-0, Alendronate sodium 129618-40-2, Navirapine 130209-82-4, Latanoprost 130929-57-6, Entacapone 134308-13-7, Tolcapone 134523-00-5, Atorvastatin 137862-53-4, Valsartan 138402-11-6, Irbesartan 143003-46-7, Alglucerase 144494-65-5, Tirofiban 144701-48-4, Telmisartan 145599-86-6, Cerivastatin 147059-72-1, Trovafloxacin 147245-92-9, Copolymer 1 150378-17-9, Indinavir 151096-09-2, Moxifloxacin 161814-49-9, Amprenavir 169590-42-5, Celecoxib 171599-83-0, Sildenafil citrate 172820-23-4, Pexiganan acetate 180288-69-1, Trastuzumab 185243-69-0, Etanercept 188627-80-7, Eptifibatide 339524-26-4, Amiodorone 339524-30-0, Cyclopegic 339524-35-5, Cytosin 339524-50-4, Hyperozia
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

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IT 107-97-1, Sarcosin 447-41-6, Nylidrin 8056-51-7 9000-86-6, Alanine aminotransferase 9000-97-9 9001-05-2, Catalase 9001-40-5, Glucose-6-phosphate dehydrogenase 9001-48-3, Glutathione reductase 9001-50-7, Glyceraldehyde 3-phosphate dehydrogenase 9001-62-1, Hepatic lipase 9001-84-7, Phospholipase A2 9002-03-3, Dihydrofolate reductase 9002-06-6, Thymidine kinase 9002-12-4, Urate oxidase 9002-67-9, Luteinizing hormone 9003-99-0, Myeloperoxidase 9012-25-3, Catechol-O-methyltransferase 9012-38-8, PAPS synthetase 9012-39-9 9012-52-6, S-Adenosylmethionine synthetase 9013-08-5, Phosphoenolpyruvate carboxykinase 9013-18-7, Fatty acyl-CoA synthetase 9013-38-1, Dopamine β -hydroxylase 9013-66-5, Glutathione peroxidase 9013-79-0, Neuropathy target esterase 9014-55-5, Tyrosine aminotransferase 9015-71-8, Corticotropin releasing hormone 9015-81-0, 17- β Hydroxysteroid dehydrogenase 9016-12-0, Hypoxanthine-guanine phosphoribosyltransferase 9023-44-3, Tryptophanyl-tRNA synthetase 9023-62-5, Glutathione synthetase 9023-64-7, γ -Glutamylcysteinyl synthetase 9023-70-5, Glutamine synthetase 9024-60-6, Ornithine decarboxylase 9024-61-7, Histidine decarboxylase 9025-32-5, Prolidase 9026-00-0, Cholesterol esterase 9026-09-9, Phenol sulfotransferase 9026-43-1, Serine kinase 9026-51-1, Nucleoside diphosphate kinase 9027-13-8, Enoyl-CoA hydratase 9027-65-0, Acyl-CoA dehydrogenase 9028-06-2 9028-31-3, Aldose reductase 9028-35-7, HMG CoA reductase 9028-41-5, Hydroxyacyl-Coenzyme A dehydrogenase 9028-86-8, Aldehyde dehydrogenase 9029-73-6, Phenyl alanine hydroxylase 9029-80-5, Histamine N-methyltransferase 9029-97-4, 3-Ketoacyl-CoA thiolase 9031-37-2, Ceruloplasmin 9031-54-3, Sphingomyelinase 9031-61-2, Thymidylate synthase 9031-72-5, Alcohol dehydrogenase 9032-20-6, DT-Diaphorase 9032-76-2 9035-58-9, Blood-coagulation factor III 9036-22-0, Tyrosine hydroxylase 9037-21-2, Tryptophan hydroxylase 9037-62-1, Glycyl tRNA synthetase 9039-06-9, NADPH cytochrome P450 reductase 9040-57-7, Ribonucleotide reductase 9041-92-3 9045-77-6, Fatty acid synthase 9046-27-9, γ -Glutamyl transpeptidase 9048-63-9, Epoxide hydrolase 9055-67-8, Poly(ADP-ribose)polymerase 9059-25-0, Lysyl oxidase 9068-41-1, Carnitine palmitoyltransferase 9074-02-6, Malic enzyme 9074-10-6, Biliverdin reductase 9074-19-5, Hydratase 9074-87-7, γ -Glutamyl hydrolase 9081-36-1, 25-Hydroxyvitamin D3 1-hydroxylase 11096-26-7, Erythropoietin

37205-63-3, ATP synthase 37237-44-8, Glucosylceramide synthase
 37289-06-8, Acid ceramidase 37292-81-2, Cytochrome p 450 11A1
 37318-49-3, Protein disulfide isomerase 39391-18-9, Prostaglandin H
 synthase 56093-23-3, α -1,2-Fucosyl transferase 56645-49-9,
 Cathepsin G 59536-73-1, Phosphomannomutase 59536-74-2, Very long-chain
 acyl-CoA dehydrogenase 60267-61-0, Ubiquitin 60616-82-2, Cathepsin L
 61116-22-1, Fatty acyl-CoA oxidase 62229-50-9, Epidermal growth factor
 67339-09-7, Thiopurine methyltransferase 67763-96-6, Insulin-like growth
 factor 1 67763-97-7, Insulin-like growth factor II 77271-19-3,
 6-O-Methylguanine-DNA methyltransferase 77847-96-2, Prostacyclin-
 stimulating factor 79747-53-8, Protein tyrosine phosphatase
 79955-99-0, Stromelysin-1 80146-85-6, Tissue Transglutaminase
 80295-41-6, Complement component C3 81627-83-0, Colony stimulating
 factor -1 82391-43-3, 12-Lipoxygenase 83268-44-4 83869-56-1,
 Granulocyte-macrophage colony-stimulating factor 85637-73-6, Atrial
 natriuretic factor 87397-91-9, Thymosin β 10 88943-21-9,
 Proteinase α 1-inhibitor III 89964-14-7, Prothymosin, alpha
 90698-26-3, Ribosomal protein S6 kinase 96024-44-1, Granulin
 105238-46-8, Macropain 106096-92-8, Fibroblast growth factor, acidic
 106956-32-5, Oncostatin M 112130-98-0, Procathepsin L 114949-22-3,
 Activin (protein) 117698-12-1, Paraoxonase 119418-04-1, Galanin
 122191-40-6, Caspase-1 123626-67-5, Endothelin-1 125978-95-2, Nitric
 oxide synthase 127464-60-2, Vascular endothelial growth factor
 137632-07-6, Extracellular-signal-regulated kinase 1 138238-81-0,
 Endothelin converting enzyme-1 140208-24-8, Tissue inhibitor of
 metalloproteinase-1 141176-92-3 141349-86-2, Cyclin dependent kinase 2
 141436-78-4, Protein kinase C 142243-03-6, Plasminogen activator
 inhibitor 2 142805-56-9, DNA topoisomerase II 142805-58-1, MAP kinase
 kinase 143180-75-0, DNA topoisomerase I 143375-65-9, Cyclin dependent
 kinase 1 145809-21-8, Tissue inhibitor of metalloproteinase-3
 146480-35-5, Matrix metalloproteinase-2 147014-97-9, Cyclin dependent
 kinase 4 148348-15-6, Fibroblast growth factor 7 149316-81-4, Branched
 chain acyl-CoA oxidase 149371-05-1, Kinase (phosphorylating), gene c-abl
 protein 149885-78-9, Hepatocyte growth factor activator 154907-65-0,
 Checkpoint kinase 155807-64-0, FEN-1 Endonuclease 165245-96-5, p38
 Mitogen-activated protein kinase 169592-56-7, CPP32 proteinase
 179241-70-4, Protein kinase ZPK 179241-78-2, Caspase 8 182372-14-1,
 Caspase 2 182372-15-2, Caspase 6 182762-08-9, Caspase 4 189258-14-8,
 Caspase 7 192465-11-5, Caspase 5 193363-12-1, Vascular endothelial
 growth factor D 194554-71-7, Tissue factor pathway inhibitor
 205944-50-9, Osteoprotegerin 220983-94-8, Sorbitol dehydrogenase
 289898-51-7, JNK1 protein kinase 303752-61-6, DNA dependent protein
 kinase 329736-03-0, Cytochrome p450 3A4 329764-85-4, Cytochrome p450
 1A1 329900-75-6, Cyclooxygenase 2 329978-01-0, Cytochrome p450 2C9
 330196-64-0, Cytochrome p450 1A2 330196-93-5, Cytochrome p450 2E1
 330207-10-8, Cytochrome p450 2B1 330589-90-7, Cytochrome p450 2C19
 330596-22-0, Cytochrome p450 1B1 330597-62-1, Cytochrome p450 2D6
 330975-22-9, Macrostatin 331462-97-6, Cytochrome p450 2B2 331462-98-7,
 Cytochrome p450 3A1 331823-00-8, Cytochrome p450 2C11 331823-12-2,
 Cytochrome p450 2C12 331823-27-9, Cytochrome p450 2A1 331827-06-6,
 Cytochrome p450 2A6 332847-52-6, Cytochrome p450 4A 336884-26-5,
 Cytochrome p450 2B10 338964-08-2, P 450 17A 338969-62-3, P 450 2A3
 338969-69-0, P 450 2F2 338969-71-4, P 450 4A1
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
 (Biological study); PROC (Process)

(methods of determining individual hypersensitivity to a pharmaceutical
 agent

from gene expression profile)

IT 9004-02-8, Lipoprotein lipase

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL

- (Biological study); PROC (Process)
 (precursor; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT 80449-02-1, Tyrosine protein kinase
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (receptor; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT 9000-83-3, ATPase
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (subunit 6; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT 9025-75-6
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (subunit B; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT 9079-67-8, NADH oxidoreductase
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (subunit MWFE, gene for; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT 9041-46-7
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (type II; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT 9001-12-1, Collagenase
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (type-1 interstitial; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT 60382-71-0, Diacylglycerol kinase
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (zeta; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT 9012-90-2
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (α and β ; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)

L20 ANSWER 9 OF 10 HCAPLUS COPYRIGHT 2005 ACS on STN
 AN 2000:497272 HCAPLUS
 DN 134:99209
 ED Entered STN: 24 Jul 2000
 TI Immunoreceptor tyrosine-based inhibitory motifs on activating molecules
 AU Sinclair, Nicholas R. StC.
 CS Department of Microbiology and Immunology, The University of Western Ontario, London, ON, N6A 5C1, Can.
 SO Critical Reviews in Immunology (2000), 20(2), 89-102
 CODEN: CCRIDE; ISSN: 1040-8401
 PB Begell House, Inc.
 DT Journal; General Review
 LA English
 CC 15-0 (Immunochemistry)

AB A review with 76 refs. Immunoreceptor tyrosine-based inhibitory motifs (ITIMs) have the restricted consensus sequence V/I/xYxxL/V, but may be more broadly defined by the sequence V/I/L/SxYxxL/V/I/S. If one includes the ITIM of CTLA-4, then the sequence becomes ψ xYxx ψ , where ψ represents amino acids with nonpolar side chains. Aside from their presence in various inhibitory mols., ITIMs are also found on many activating receptors and pathways. ITIMs with the restricted consensus sequence occur on IL-4R α , IL-3R β type II, gp130 cytokineR, OB-R (leptinR), LIF-R β TNF-RI, G-CSF-R, PDGF-R, Blk, Ctk/Ntk, Lsk, Zap-70, PKB/RAC α , PKC- α , PKC- β , PKC- γ , PKC- δ , PKC- ξ , PKC- ϵ , PKC- η , PKC- Φ , PKC- μ , calmodulin-dependent kinase II δ , SLP-76-associated protein, FYN-binding protein, Shc binding protein, RasGRF2, CDC25 homolog, Jak2, Jak3, PLC β 1, and PLC β 3. If ITIMs are defined by a broader consensus sequence, the list of ITIMs on activating mols. becomes even larger. In some instances, these ITIMs have been shown to associate with inhibitory phosphatases. Whether these ITIMs on activating receptors/pathways are necessary and sufficient for neg. control of activating events and for immunol. tolerance is not yet known. In some instances, ITIMs on co-inhibitory receptors are also required for appropriate neg. regulation. By studying events leading to neg. control during activation and to immune tolerance, it should be possible to discern the balance between antigen receptor-based neg. events and co-inhibition.

ST ITIM inhibitory motif activating mol review

IT Protein motifs
(ITIM; immunoreceptor tyrosine-based inhibitory motifs on activating mols.)

IT Antigens
Receptors
RL: BOC (Biological occurrence); BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence); PROC (Process)
(activating; immunoreceptor tyrosine-based inhibitory motifs on activating mols.)

IT Immune tolerance
Signal transduction, biological
(immunoreceptor tyrosine-based inhibitory motifs on activating mols.)

RE.CNT 76 THERE ARE 76 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Adachi, M; Oncogene 1997, V14, P1629 HCAPLUS
- (2) Adachi, T; Am J Physiol 1998, V275, PC623 HCAPLUS
- (3) Anderson, C; Clin Exp Immunol 1997, V109, P473 HCAPLUS
- (4) Anderson, C; Crit Rev Immunol 1998, V18, P525 HCAPLUS
- (5) Aragane, Y; Proc Natl Acad Sci USA 1997, V94, P11490 HCAPLUS
- (6) Blery, M; Clin Chem Lab Med 1999, V37, P187 HCAPLUS
- (7) Bolland, S; Adv Immunol 1999, V72, P149 HCAPLUS
- (8) Boussiotis, V; Science 1997, V278, P124 HCAPLUS
- (9) Bretscher, P; Science 1970, V169, P1042 HCAPLUS
- (10) Cambier, J; Curr Top Microbiol Immunol 1999, V244, P43 HCAPLUS
- (11) Coggeshall, K; Curr Opin Immunol 1998, V10, P306 HCAPLUS
- (12) Coggeshall, K; Curr Top Microbiol Immunol 2000, V245(1), P213 HCAPLUS
- (13) Cornall, R; Curr Top Microbiol Immunol 1999, V244, P57 HCAPLUS
- (14) Daeron, M; Annu Rev Immunol 1997, V15, P203 HCAPLUS
- (15) Dahia, P; Hum Mol Genet 1999, V8, P185 HCAPLUS
- (16) Duff, J; J Invest Dermatol 1997, V108, P295 HCAPLUS
- (17) Famiglietti, S; Immunol Lett 1999, V68, P35 HCAPLUS
- (18) Flaswinkel, H; Semin Immunol 1995, V7, P21 HCAPLUS
- (19) Gadina, M; J Immunol 1999, V162, P2081 HCAPLUS
- (20) Genestier, L; J Exp Med 1999, V189, P231 HCAPLUS

- (21) Gergely, J; Immunol Lett 1999, V68, P3 HCAPLUS
- (22) Haque, S; J Biol Chem 1998, V273, P33893 HCAPLUS
- (23) Healy, J; Annu Rev Immunol, 1998 1998, V16, P645 HCAPLUS
- (24) Hirano, T; Int Rev Immunol 1998, V16, P249 HCAPLUS
- (25) Huber, M; EMBO J 1998, V17, P7311 HCAPLUS
- (26) Hutchcroft, J; J Immunol 1998, V161, P4506 HCAPLUS
- (27) Igarashi, K; Biochem Biophys Res Commun 1998, V246, P95 HCAPLUS
- (28) Imani, F; J Biol Chem 1997, V272, P7927 HCAPLUS
- (29) Janeway, C; Immunobiology: The Immune System in Health and Disease, 4th ed 1999
- (30) Jiao, H; Mol Cell Biol 1996, V16, P6985 HCAPLUS
- (31) Jin, Y; J Immunol 1998, V161, P1743 HCAPLUS
- (32) Jin, Y; J Immunol 1998, V161, P1743 HCAPLUS
- (33) Kim, H; Mol Cell Biol 1998, V18, P1525 HCAPLUS
- (34) Kim, S; Oncogene 1998, V16, P89 HCAPLUS
- (35) Kim, S; Oncogene 1998, V16, P89 HCAPLUS
- (36) Klaus, S; Mol Immunol 1993, V30, P1553 HCAPLUS
- (37) Klingmuller, U; Cell 1995, V80, P729 MEDLINE
- (38) Lee, J; J Immunol 1998, V161, P1637 HCAPLUS
- (39) Liu, H; J Immunol 1999, V163, P599 HCAPLUS
- (40) Long, E; Annu Rev Immunol 1999, V17, P875 HCAPLUS
- (41) Maehama, T; J Biol Chem 1998, V273, P13375 HCAPLUS
- (42) Maehama, T; J Biol Chem 1998, V273, P13375 HCAPLUS
- (43) Massa, P; Interferon Cytokine Res 1998, V18, P499 HCAPLUS
- (44) Matsuguchi, T; J Biol Chem 1998, V273, P19411 HCAPLUS
- (45) Matzinger, P; Annu Rev Immunol 1994, V12, P991 MEDLINE
- (46) Migone, T; Proc Natl Acad Sci USA 1998, V95, P3845 HCAPLUS
- (47) Miyamoto, A; Immunol Lett 1998, V63, P75 HCAPLUS
- (48) Nelms, K; Annu Rev Immunol 1999, V17, P701 HCAPLUS
- (49) Nelms, K; Immunity 1998, V9, P13 HCAPLUS
- (50) O'Garra, A; Proc Natl Acad Sci USA 1987, V84, P6254 HCAPLUS
- (51) Phillips, N; J Immunol 1988, V141, P4243 HCAPLUS
- (52) Pingel, S; J Exp Med 1999, V189, P1111 HCAPLUS
- (53) Plas, D; Science 1996, V272, P1173 HCAPLUS
- (54) Rathmell, J; Cell 1996, V87, P319 HCAPLUS
- (55) Ravetch, J; Annu Rev Immunol 1991, V9, P457 HCAPLUS
- (56) Salojin, K; J Immunol 1999, V163, P844 HCAPLUS
- (57) Schwartz, R; Cold Spr Harb Symp Quant Biol 1989, V54, P605 HCAPLUS
- (58) Sinclair, N; Adv Exp Med Biol 1971, V12, P609
- (59) Sinclair, N; Cell Immunol 1987, V107, P465 MEDLINE
- (60) Sinclair, N; Life Sci 1993, V52, P1985 HCAPLUS
- (61) Sinclair, N; Nature 1971, V234, P104 HCAPLUS
- (62) Sinclair, N; Scand J Immunol 1996, V43, P597 HCAPLUS
- (63) Tabrizi, M; Leukemia 1998, V12, P200. MEDLINE
- (64) Tsubata, T; Curr Opin Immunol 1999, V11, P249 HCAPLUS
- (65) Tsuchida, M; Eur J Immunol 1999, V29, P2354 HCAPLUS
- (66) Tsuchida, M; J Biol Chem 1999, V274, P6735 HCAPLUS
- (67) Tuosto, L; Eur J Immunol 1998, V28, P2131 HCAPLUS
- (68) van Zant, G; Exp Hematol 1989, V17, P81 MEDLINE
- (69) Vilen, B; Immunity 1999, V10, P239 HCAPLUS
- (70) Wang, X; Exp Hematol 1999, V27, P139 HCAPLUS
- (71) Yang, W; Exp Hematol 1998, V26, P1126 HCAPLUS
- (72) Yano, S; Nature 1998, V396, P584 HCAPLUS
- (73) Yi, T; Mol Cell Biol 1993, V13, P7577 HCAPLUS
- (74) Yin, T; J Biol Chem 1997, V272, P1032 HCAPLUS
- (75) You, M; Mol Cell Biol 1999, V19, P2416 HCAPLUS
- (76) Zamorano, J; J Immunol 1998, V161, P859 HCAPLUS

L20 ANSWER 10 OF 10 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 1992:122226 HCAPLUS

DN 116:122226
 ED Entered STN: 03 Apr 1992
 TI Genetic and molecular analysis of *cdrl/nim1* in *Schizosaccharomyces pombe*
 AU Feilotter, H.; Nurse, P.; Young, P. G.
 CS Dep. Biol., Queen's Univ., Kingston, ON, K7L 3N6, Can.
 SO Genetics (1991), 127(2), 309-18
 CODEN: GENTAE; ISSN: 0016-6731
 DT Journal
 LA English
 CC 3-3 (Biochemical Genetics)
 Section cross-reference(s): 6
 AB The *cdrl* gene in *S. pombe* was identified as a mutation affecting the nutritional responsiveness of the mitotic size control. *cdrl* Alleles have been further analyzed for genetic interactions with elements of the mitotic control pathway and cloned by plasmid rescue of a conditional lethal *cdrl-76 cdc25-22* double mutant. These analyses show that the *cdrl* gene is allelic to *nim1*, a gene identified as a high copy number plasmid suppressor of the mitotic control gene, *cdc25*. The gene structure for *cdrl* differs from the described *nim1* gene in the carboxyl-terminal portion of the gene. The published *nim1* sequence encoded a product of predicted Mr 45,000, and included 356 amino acids from the amino-terminal region of the gene and 14 amino acids from a noncontiguous carboxyl-terminal fragment. The *cdrl* sequence includes an addnl. 237 amino acids of the contiguous fragment and encodes a product of predicted Mr 67,000. The sequence shows a high level of identity with protein kinases over the amino-terminal catalytic domain, and limited identity with yeast protein kinases SNF1, KIN2 and KIN1 over part of the carboxyl-terminal domain. The effect of overexpression of the full length gene has been examined in various genetic backgrounds. These data show that the full length gene product is required to give a normal cell cycle response to nitrogen starvation. A detailed examination of the genetic interaction of *cdrl* mutants with various mutants of mitotic control genes (*cdc2*, *cdc25*, *wee1*, *cdc13*) demonstrated strong interactions with *cdc25*, some *cdc2* alleles, and with *cdc13-117*. Overall, the results are interpretable within the framework of the existing model of *cdrl/nim1* action in mitotic control, i.e., *cdrl* functions upstream of *wee1* to relieve mitotic inhibition.
 ST *Schizosaccharomyces* mitosis gene *cdrl* protein sequence
 IT *Schizosaccharomyces pombe*
 (gene *cdrl* of, for relief of mitotic inhibition, nucleotide and encoded peptide sequences of)
 IT Deoxyribonucleic acid sequences
 (gene *cdrl* protein-specifying, of *Schizosaccharomyces pombe*, complete)
 IT Mitosis
 (inhibition of *Schizosaccharomyces pombe*, gene *cdrl* for relief of, sequence of)
 IT Protein sequences
 (of gene *cdrl* protein, of *Schizosaccharomyces pombe*, complete)
 IT Gene, microbial
 RL: BIOL (Biological study)
 (*cdrl*, for relief of mitotic inhibition in *Schizosaccharomyces pombe*, nucleotide and encoded peptide sequences of)
 IT 139047-10-2
 RL: PRP (Properties)
 (amino acid sequence of)
 IT 139045-94-6, Deoxyribonucleic acid (*Schizosaccharomyces pombe* clone *pcdrl* gene *cdrl*) 139045-95-7, Deoxyribonucleic acid (*Schizosaccharomyces pombe* clone *pcdrl* gene *cdrl* plus 5'- and 3'-flanking region fragment)
 RL: PRP (Properties); BIOL (Biological study)

(nucleotide sequence of)

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CAS REGISTRY NUMBERS AND CHEMICAL NAMES (CNs) PRESENT
FROM JANUARY 1969 TO DATE.

RECORDS LAST ADDED: 29 June 2005 (20050629/ED)

FILE RELOADED: 19 October 2003.

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L30 ANSWER 1 OF 1 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
AN 1992:88138 BIOSIS
DN PREV199242040413; BR42:40413
TI REGULATION OF THE CDC25 PROTEIN IN XENOPUS EGG EXTRACTS.
AU KUMAGAI A [Reprint author]; DUNPHY W G
CS DIV BIOLOGY, CALIF INST TECHNOLOGY, PASADENA, CALIF 91225, USA
SO Journal of Cell Biology, (1991) Vol. 115, No. 3 PART 2, pp. 243A.
Meeting Info.: ABSTRACTS OF PAPERS PRESENTED AT THE THIRTY-FIRST ANNUAL
MEETING OF THE AMERICAN SOCIETY FOR CELL BIOLOGY, BOSTON, MASSACHUSETTS,
USA, DECEMBER 8-12, 1991. J CELL BIOL.
CODEN: JCLBA3. ISSN: 0021-9525.
DT **Conference; (Meeting)**
FS BR
LA ENGLISH
ED Entered STN: 4 Feb 1992
Last Updated on STN: 5 Feb 1992
CC General biology - Symposia, transactions and proceedings 00520
Cytology - Animal 02506
Genetics - Animal 03506
Biochemistry studies - Nucleic acids, purines and pyrimidines 10062
Biochemistry studies - Proteins, peptides and amino acids 10064
Biophysics - Molecular properties and macromolecules 10506
Enzymes - Physiological studies 10808
IT Major Concepts
Biochemistry and Molecular Biophysics; Cell Biology; Enzymology
(Biochemistry and Molecular Biophysics); Genetics
IT Miscellaneous Descriptors
ABSTRACT ATP PROTEIN KINASE POLYMERASE CHAIN REACTION DNA
ORGN Classifier
Salientia 85306
Super Taxa
Amphibia; Vertebrata; Chordata; Animalia
Taxa Notes
Amphibians, Animals, Chordates, Nonhuman Vertebrates, Vertebrates
RN 56-65-5Q (ATP)
42530-29-0Q (ATP)
94587-45-8Q (ATP)
111839-44-2Q (ATP)
9026-43-1Q (PROTEIN KINASE)
80449-02-1Q (PROTEIN KINASE)
134549-83-0Q (PROTEIN KINASE)
372092-80-3Q (PROTEIN KINASE)

87805-51-4Q (ATP)

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FILE 'HCAPLUS' ENTERED AT 13:07:17 ON 07 JUL 2005

E GUO Z/AU
L1 327 S E3,E10
E GUO ZI/AU
L2 28 S E3,E8
L3 117 S E31,E32
E DUNPHY W/AU
L4 67 S E4-E8
L5 1 S (US20040018603# OR US6593110 OR US20020086392#)/PN OR (US2003
E CDC25
L6 1217 S E3
L7 1995 S CDC25?
L8 14 S L1-L5 AND L6,L7
L9 1 S L8 AND L5
L10 1 S L6,L7 AND 517
L11 3 S L6,L7 AND SQ(S)TQ
L12 5 S L6,L7 AND CARBOX? (S) TERMIN? (S) KINASE
L13 2 S L6,L7 AND CTK
L14 1 S L6,L7 AND AMINO(L) TERMIN? (L) FORKHEAD
L15 12 S L5,L6 AND 58
L16 2 S L5,L6 AND 58() (KD OR KDALTON OR KILODALTON OR KILO DALTON)
L17 1 S L5,L6 AND 58(L) (MW OR MOL MASS OR MOL WEIGHT)
L18 9 S L9-L14,L16,L17
L19 1 S L5,L6 AND 58 KDA
L20 10 S L18,L19
L21 0 S L5,L6 AND (58000 OR 58 000)
L22 13 S L8 NOT L20

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SET COST ON

FILE 'BIOSIS' ENTERED AT 13:17:07 ON 07 JUL 2005

E GUI Z/AU
E GUO Z/AU
L23 283 S E3,E11
E GUO ZI/AU
L24 37 S E3,E6,E11,E12
L25 1 S E13
E DUNPHY W/AU
L26 75 S E3-E6
E CDC25
L27 1642 S CDC25?
L28 13 S L23-L26 AND L27
L29 13 S L28 AND PY<=2000
L30 1 S L29 AND CONFERENCE/DT
SET COST OFF

FILE 'BIOSIS' ENTERED AT 13:19:21 ON 07 JUL 2005
SET COST ON

FILE 'BIOSIS' ENTERED AT 13:20:11 ON 07 JUL 2005